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ACTIVITIES REPORT
REGISTRY OF TUMORS IN LOWER ANIMALS

1965 - 1973

JOHN C. HARSHBARGER, DIRECTOR

MAILING ADDRESS:

REGISTRY OF TUMORS IN LOWER ANIMALS
NATIONAL MUSEUM OF NATURAL HISTORY
ROOM W-216A
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ESTABLISHMENT, OBJECTIVES, AND OPERATION

The Registry of Tumors in Lower Animals was begun in 1965 as a cooperative project between the National Cancer Institute (Contract No. N01-CB-33874) and the Smithsonian Institution to study tumors in invertebrate and poikilothermic vertebrate animals. Objectives are: (1) to collect, identify, characterize, and preserve specimens with neoplasms and related disorders from natural habitats, zoos, aquaria, and laboratory experiments; (2) to conduct and promote experimental studies of the nature, incidence, and etiology of these diseases; and, (3) to analyze, correlate, and disseminate pertinent published and unpublished information. As a result of such efforts, a number of benefits may accrue:

1. An improved understanding of the biology of cancer as it occurs at various levels of phylogeny.
2. Evidence concerning the question of whether certain animals may be exempt from cancer, and if so, why.
3. Evidence that may lead to discovery of new etiologic agents in cancer.
4. Evidence of carcinogens in the environment.
5. Evidence that may bear on certain theories of cancer: e.g., the oncogene theory, the clonal selection theory, the somatic mutation theory, and others.
6. Discovery of types of animals that may be useful in cancer research because of specific features such as differences in immunological complexity, unusual sensitivity or resistance to carcinogens, ability to concentrate certain elements, such as Hg, Cu, or Zn, genetic features influencing cancer rates, ability to reject tumors by autectomy, and so on.
7. Discovery of possible reservoirs or vectors of oncogenic viruses.
8. Identification and protection of populations in possible jeopardy from epizootic neoplasia.
9. Maintenance of a proper perspective among citizens concerned about the significance of reports of cancer among lower animals of economic importance.

After specimens with cryptogenic and induced lesions are received they are photographed, studied grossly and microscopically and stored for easy retrieval. An effort is made to determine the nature of the lesion or verify the diagnosis of the contributor, often after getting the opinion of one or more specialists for the type of animal or tissue involved. When specimens are received which appear to be good research models for furthering the understanding of neoplastic processes, research projects may be initiated by the Registry with the consent of the contributor.

PHYSICAL PLANT

Laboratory, storage, and office space occupies three rooms in the National Museum of Natural History, Smithsonian Institution, Tenth and Constitution Avenue, Northwest, Washington, D.C. In addition, the Registry has use of electron microscope, darkroom, and aquarium facilities. Library and duplication services are also available.

INFORMATION CONCERNING THIS REPORT

This report is cumulative for all accessions in the Registry's collection as of 5 December 1973. It supersedes earlier reports in that most cases previously listed as pending now have diagnoses and some cases have been reinterpreted following additional study. As a new feature, pertinent references are given for those accessions that have been specifically described in the literature or that exemplify a type of disease that has been the subject of a series of papers.

Additional information concerning selected unpublished cases can be made available on request. Persons interested in the comparative study of slides in the collection may either visit the Registry or request duplicate slides on short-term loan. Slides do not circulate from accessions that do not contain duplicate material; those that contain rare and irreplaceable material; and accessions that are being worked up for publication by the contributor. Anyone desiring to publish photographs from such comparative studies is expected to obtain permission from the contributor. Twenty sets of 20 slides each are available as instructional aides.

This report is being distributed to all contributors whose address is still known and to other persons who have expressed an interest in the work of the Registry and/or tumors in lower animals. It is also being sent to selected persons known to be studying diseases in various cold-blooded vertebrates and invertebrates for their possible interest in this peripheral field. Approximately 2,000 copies will be distributed.

DISTRIBUTION OF SPECIMENS IN THE COLLECTION

Specimens are accessioned individually except when groups of the same species having similar pertinent parameters (collecting site; type of disease; same experimental study, etc.) are received at the same time. We have been particularly fortunate that several collections of research material have been contributed en masse: e.g., RTLA 577 by Dr. William R. Duryee; RTLA 809 by Dr. Gladys S. King; and RTLA 443 by Miss Leora Stark, Mr. Douglas A. Stark, and Dr. James C. Dahl for Dr. Mary B. Stark.

As of 5 December 1973 there were 887 accessions in the collection distributed as follows:

DISTRIBUTION OF SPECIMENS IN THE COLLECTION (CONTD)

	<u>Neoplastic</u>	<u>Non-neoplastic</u>	<u>Indeterminant</u>	<u>Total</u>
Reptiles	38	53	0	91
Amphibians	41	36	0	77
Bony fish	252	156	22	430
Sharks	3	7	0	10
Lampreys	1	3	0	4
Tunicates	0	6	0	6
Mollusks	68	61	1	130
Echinoderms	0	5	1	6
Arthropods	6	73	3	82
Annelids	0	22	0	22
Acanthocephala	0	1	0	1
Platyhelminths	0	10	0	10
Coelenterates	0	7	7	14
Porifera	0	1	1	2
Protozoa	0	1	0	1
Fungi	0	1	0	1
	<u>409</u>	<u>443</u>	<u>35</u>	<u>887</u>

The non-neoplastic lesions include infectious and parasitic granulomas, developmental anomalies, and injury and wound repair. Indeterminant lesions either have not been fully examined or the material is inadequate for diagnosis.

Among the accessions with neoplasms, additional diseased specimens can be field collected in the following cases:

Tiger salamander	Fibroma/papilloma	Southcentral USA
Cunner	Papilloma	Northeast USA
White croaker	Papilloma	California, USA
Atlantic eel	Papilloma	Europe
Various flatfish	Papilloma	Western USA
Rock oyster	Papilloma	Australia
American oyster	Hematopoietic neoplasm	Eastern USA
Leopard frog	Renal adenocarcinoma	Northeast/Northcentral USA
Green turtle	Fibroma	Hawaii/Caribbean
Northern pike	Lymphosarcoma	Europe/North America
Various catfish	Papilloma/carcinoma	USA
Yellowfin goby	Papilloma	Japan/Korea
Goldfish	Fibroma	USA
Muskellunge	Lymphoma	North America

SUBMITTING SPECIMENS

We invite you to help in building this collection by submitting examples of induced or naturally occurring neoplasms, pre-neoplastic conditions, or indeterminate lesions of a presumptive neoplastic nature that require confirmation. As there is an indistinct boundary between

neoplastic disease and the process of inflammation, repair, and regeneration, examples of the latter processes are also useful to establish points of reference. If we prepare the material histologically, a set of slides will be returned to the contributor with our diagnosis.

Specimens are accepted alive, fixed, in blocks, and on slides. Frozen specimens are generally unsatisfactory for preparation of good histological material, but sometimes are useful when an infectious agent must be sought.

Many specimens arrive poorly fixed for the following reasons:

1. Delay in fixation - Specimens should be fixed immediately after death or when death is imminent since degeneration in some cells begins premortem. If a delay is unavoidable, specimens should be kept cool in the interim, BUT NOT FROZEN.
2. Slow or incomplete penetration - To remedy this we recommend:
 - a. Always open body cavity or inject fixative;
 - b. Either inject the fixative or preferably, make deep transverse incisions intermittently along the length of large tumors and organs. This is especially important for fixatives that penetrate slowly (e.g., 10 percent formalin);
 - c. Use fixatives that penetrate rapidly (Bouin's works well for fish, Davidson's for marine mollusks, and Dietrich's [FAA] for insects);
 - d. Remove air from the tracheae of insects by sub-jecting them to negative pressure (vacuum chamber) while immersed in the fixative for as long as bubbles continue to appear; and,
 - e. For electron microscopy submit bits of tissue, less than 2 mm in diameter, in glutaraldehyde.
3. Insufficient volume of fixative - A volume of chemical ten times the volume of the specimen is recommended.

REPRINT LIBRARY

A continuing project to assemble a complete library of reprints relating to neoplasms in invertebrates and poikilothermic vertebrate animals presently contains more than 2,500 reprints (see computer abstract form on next page) is nearing completion. Following final editing, searches will be made at a reasonable cost. WE WILL NOT HONOR REQUESTS FOR XEROX COPIES OF REPRINTS.

001: Author:
002: Date:
003: Title:
004: Journal information:
005: Serial number:
006: Review Antitumor agent Research Associated material Vector
007: Corresponding RTLA number:
008: Language (if not English):
009: Phylum: 013: Genus:
010: Class: 014: Species:
011: Order: 015: Strain:
012: Family:
016: Continent: 019: City/County
017: Country: 020: Habitat:
018: State/Province: F M E T
021: Neoplastic Borderline Tumor Hyperplastic Hypertrophy
Mutagenic Developmental anomaly Infectious Inflammation
Injury and repair Toxic Normal
022: Epithelial Nonepithelial
023: System of origin: Integumentary Skeletal Nervous Circulatory
Endocrine Digestive Excretory Reproductive Respiratory
Mesenchymal Sensory Muscular Hematopoietic
024: Organ of origin:
025: Cell of origin:
026: Diagnosis:
027: Transmission: Cell free extract Tissue homogenate
Graft Other:
028: Induced?
029: Invasive?
030: Metastasis?
031: Physiology:
032: Virus, RNA, DNA 036: Bacteria:
033: Chemical: 037: Protozoa:
034: Transplant/Graft: 038: Fungus:
035: Physical: Radiation 039: Parasite:
Trauma Temperature 040: Genetics:
Other:

RESEARCH

While several research projects in cooperation with contributors are in early phases, the principal study has been on the nature, incidence, and etiology of epidermal carcinomas and papillomas in several populations of fish, under the auspices of the Committee on Comparative Oncology of the Union Internationale Contre le Cancer (UICC). This Committee is composed of eight scientists each of which, with a small work group, is making an in-depth study of one or two particular populations of lower animals with a significant incidence of a neoplastic disease. The purposes and objectives of this Committee have been described in detail by its Chairman (Dawe, C. J. Comparative Oncology and Environmental Carcinogens. UICC Bull. Cancer, 8(4): 2-3; Dec. 1970).

PAPERS WITH AVAILABLE COPIES

- Harshbarger, J. C. & R. L. Taylor. Neoplasms of Insects. Annu. Rev. Entomol., 13: 159-190. (1968).
- Cantwell, G. E., J. C. Harshbarger, R. L. Taylor, C. Kenton, M. S. Slatick, & C. J. Dawe. A Bibliography of the Literature on Neoplasms of Invertebrate Animals. GANN Monogr. 5, pp. 57-84. (1968).
- Harshbarger, J. C. The Registry of Tumors in Lower Animals. Natl. Cancer Inst. Monogr. 31, pp. XI-XVI. (1969).
- Harshbarger, J. C. & G. W. Bane. Case Report of a Fibrolipoma on a Rockfish, Sebastes diploproa. Natl. Cancer Inst. Monogr. 31, pp. 219-221. (1969).
- Dawe, C. J. & J. C. Harshbarger (ed.). Natl. Cancer Inst. Monogr. 31: Neoplasms and Related Disorders of Invertebrate and Lower Vertebrate Animals. 772 pp. (1969).
- Harshbarger, J. C., G. E. Cantwell, & M. F. Stanton. Effects of N-nitrosodimethylamine on the Crayfish, Procambarus clarkii. In: Proceedings: IVth International Colloquium on Insect Pathology [held in conjunction] with The Society for Invertebrate Pathology, 25-28 August 1970, College Park, Md., pp. 425-430. (1970).
- Cosgrove, G. E. & J. C. Harshbarger. Testicular Tumor in a Salamander. J. Amer. Vet. Med. Assoc., 159: 582. (1971).
- Zwart, P. & J. C. Harshbarger. Hematopoietic Neoplasms in Lizards: Report of a Typical Case in Hydrosaurus amboinensis and of a Probable Case in Varanus salvator. Intl. J. Cancer, 9: 548-553. (1972).
- Harshbarger, J. C. Work of the Registry of Tumours in Lower Animals with Emphasis on Fish Neoplasms. Symp. Zool. Soc. London, No. 30: 285-303. (1972).
- Harshbarger, J. C. Invertebrate Animals--What Can They Contribute to Cancer Research? Fed. Proc., 32: 2224-2227. (1973).

Harshbarger, J. C. & C. J. Dawe. Hematopoietic Neoplasms in Invertebrate and Poikilothermic Vertebrate Animals. In: Unifying Concepts of Leukemia, Bibl. haemat., No. 39, R. M. Dutcher & Chieco-Bianchi (ed.), pp. 1-25, Karger: Basel. (1973).

Harshbarger, J. C. & R. M. Faust. Environmental Factors Internal to the Host That Affect the Success of Microbial Insecticides. Ann. N. Y. Acad. Sci., 217: 131-140. (1973).

PAPERS IN PRESS

Harshbarger, J. C. Radiation, Neoplasms, Carcinogenic Chemicals, and Insects. In: Insect Diseases, Vol. 2, G. E. Cantwell (ed.), Marcel Dekker: New York. (expected May 1974).

Dawe, C. J. & J. C. Harshbarger. Neoplasms in Feral Fishes: Their Significance to Cancer Research. Symposium on Fish Pathology, 7-9 August 1972, Armed Forces Institute of Pathology, Washington, D.C. (expected Spring 1974).

HIGHLIGHTS

Some significant discoveries pertaining to cold-blooded animal tumors during the last decade are listed below. Numerous examples of these and similar cases have been contributed to the Registry for which we are greatly appreciative.

1. The initial discovery of the carcinogenicity of aflatoxins resulted from the study of hepatomas in hatchery rainbow trout. For brief history and tumor characteristics see Ashley, Laurence M. Liver Cell Carcinoma in Rainbow Trout. Amer. J. Pathol., 72: 345-348; 1973.
2. The first fish neoplasms of central nervous system origin: (1) an olfactory neuroepithelioma in a bloater (RTIA 257); and (2) a retinoneuroblastoma in a croaker (RTIA 650). Since neuroepitheliomas can be induced in hamsters by a nitrosamine [Herrold, K. Cancer, 17: 114-121; 1964] perhaps nitrosamines are a significant environmental pollutant.
3. A lamprey with a metastatic melanoma (RTIA 89) is the most primitive vertebrate in which a malignant type neoplasm has been found.
4. A hematopoietic neoplasm in a sandbar shark (RTIA 523) is the only blood cell tumor in a Chondrichthyes.
5. New evidence that a herpes virus causes the Lucké renal adenocarcinoma in leopard frogs.

6. The first reports of hematopoietic neoplasms in reptiles [Cowan, D. F. J. Amer. Vet. Med. Assoc., 153: 848-859, 1968; Frank, W. & A. Schepky. Pathol. Vet., 6: 437-443, 1969].
7. The only C-type virus in lower animals was discovered in a viper [Zeigel, R. F. & H. F. Clark. J. Natl. Cancer Inst., 43: 1097-1102; 1969] and DNA polymerase activity is associated with this RNA virus [Hatanaka, M. et al. Proc. Natl. Acad. Sci. USA, 67: 143-147; 1970].
8. Experimental studies on the epizootic hematopoietic neoplasms in northern pike (RTLA 112) and muskellunge (RTLA 808) suggests a viral etiology.
9. Transplantable hematopoietic neoplasms in a Mexican axolotl (RTLA 506).
10. Transplantable invasive neuroblastomas and imaginal disk neoplasms in insects (RTLA 381-383).
11. Epizootic hematopoietic neoplasms in various oysters and mussels involving two cell types (RTLA 224, 225, 235, 502).
12. Papillomas and carcinomas in bullheads from selected Florida lakes (RTLA 288, 289, and numerous others in the collection).
13. Papillomas in several populations of Australian oysters (RTLA 107, 151, 160-162, 215, 223).
14. Discovery of a herpes virus in an oyster [Farley, C. A., W. G. Banfield, G. Kasnic, Jr., & W. S. Foster. Science, 178: 659-760; 1972].
15. The first discovery of adenomatous polyps of gastric mucosa in cold-blooded animals (RTLA 570, 571). These tumors were found in trout which also had hepatomas. Aflatoxin was absent from the diet so some other carcinogen must have been involved.
16. Papillomas (RTLA 550-553) and an ameloblastic odontoma (RTLA 675) in cunners.
17. The first smooth muscle neoplasm (leiomyosarcoma) in a reptile (RTLA 560).
18. Epizootic skin neoplasms in neotenic tiger salamanders in a sewage settling pond (RTLA 791, 792).

19. Induction of hepatocellular and cholangiocellular neoplasms in guppies with azo compounds [Khudolei, V. V. J. Ichthyol. (English translation of Voprosy Ikhtiologii), 12: 319-324, 1972], in guppies and zebra fish with diethylnitrosamine [Stanton, M. F. J. Natl. Cancer Inst., 34: 117-130, 1965] with dimethylnitrosamine [Khudolei, V. V. Vopr. Onkol., 19: 88-94, 1973], and with nitrosomorpholine [Khudolei, V. V. (in press)].
20. Induction of hepatomas in trout and salmon with aflatoxin B₁, aflatoxin B₁ plus cyclopropene, urethane, dimethylnitrosamine, acetylaminofluorene, aminoazotoluene, para-dimethylaminoazobenzene and DDT and nephroblastomas in rainbow trout with dimethylnitrosamine [Reviewed by Wales, J. H. and by Ashley, L. M. In: A Symposium on Diseases of Fishes and Shellfishes, S. F. Snieszko (ed.), Am. Fisheries Soc. Special Pub. No. 5, 1970, pp. 351-365 and 366-379 respectively]. Examples of induced hepatomas and nephroblastomas in rainbow trout contributed by Dr. L. M. Ashley; RTLA 296-326.
21. Induction of papillomas and adenomas in apple snails by 20-methylcholanthrene and 3,4-benz-pyrene (RTLA 269). [See review: Krieg, K. Invertebraten in der Geschwulstforschung. Beiträge zur Krebsforschung, Vol. 12, Verlag Theodor Steinkopff: Dresden, 215 pp., 1973].

PERSONNEL

The Project Officer for the contract is Dr. Clyde J. Dawe, Head, Comparative Oncology Section, Laboratory of Pathology, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, 20014.

The Principal Investigator for the contract is Dr. David L. Pawson, Chairman, Department of Invertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C., 20560.

The Staff of the Registry is as follows:

Director - John C. Harshbarger

Registrar - Phyllis M. Schellenger

Histopathology Technician - Linda J. Cullen

Bibliographers - Judy E. Foster and Marilyn S. Slatick

LIST OF ACCESSIONS

A diagnosis or very brief description of the nature of the lesion is given in most cases. This description may be ours or the contributor's. The reprint cited is either a report on that specific case or a recent article in a series of pertinent articles.

RTLA 1. Planarian, Dugesia dorotocephala

Material: Six slides; 12 photographs

Diagnosis: Papilliform tumors and malformations

Submitter: J. A. Foster

Reprints: Foster, Jean A. Induction of Neoplasms in Planarians with Carcinogens. Cancer Res., 23: 300-303. 1963.

Foster, Jean A. Malformations and Lethal Growths in Planaria Treated with Carcinogens. Natl. Cancer Inst. Monogr. 31: 683-691. 1969.

RTLA 2. Earthworm, Lumbricus terrestris

Material: Fifteen slides; 4 photographs

Diagnosis: A large protruding mass containing spermatogonia and maturation phases of sperm occurring in an area that had received 14 daily paintings on the cuticle of a methylcholanthrene-acetone solution.

Submitter: R. L. Hancock

Reprint: Hancock, R. L. An Unusual Neoplasm in Lumbricus terrestris. Experientia, 21(5): 280-281. 1965.

RTLA 3. Drosophila melanogaster

Material: Five slides; 6 photographs

Diagnosis: Hereditary ovarian tumors

Submitter: R. C. King

Reprint: King, Robert C. Control of Oocyte Formation by Female-Sterile (fes) Drosophila melanogaster. Natl. Cancer Inst. Monogr. 31: 347-349. 1969.

RTLA 4. Blue crab, Callinectes sapidus

Material: One crab; 3 photographs; 40 slides; 2 paraffin blocks

Diagnosis: Wound healing on dorsal cephalothorax

Submitter: C. J. Dawe

RTLA 5. Mud clam, Mya arenaria

Material: One siphon; 3 photographs; 17 slides with serial sections

Diagnosis: Developmental anomaly of siphon

Submitter: M. Potter and E. Kuff

RTLA 6. Striped bass, Morone saxatilis

Material: Testes -- one with adjacent mass; 1 photograph; 1 slide

Diagnosis: Spermatocoele

Submitter: F. Schwartz

- RTLA 7. White sucker, Catostomus commersoni
Material: Three fish; 3 slides
Diagnosis: Cholangiocellular neoplasms; no evidence of metastases
Submitter: C. J. Dawe, M. Stanton, and F. Schwartz
Reprint: Dawe, Clyde J., Mearl F. Stanton, and Frank J. Schwartz.
Hepatic Neoplasms in Native Bottom-feeding Fish of Deep
Creek Lake, Maryland. Cancer Res., 24(7): 1194-1201. 1964.
- RTLA 8. Brown bullhead, Ictalurus nebulosus
Material: One fish; 2 slides
Diagnosis: (1) Regenerative hepatic nodules
(2) Minimal deviation hepatomas
Submitter: C. J. Dawe and M. Stanton
Reprint: [see RTLA 7]
- RTLA 9. Brown bullhead, Ictalurus nebulosus
Material: Three slides; 1 photograph
Diagnosis: Chronic inflammation -- foreign body reaction
Submitter: C. J. Dawe
- RTLA 10. Chain pickerel, Esox niger
Material: Two slides
Diagnosis: Pseudobranch (normal)
Submitter: C. J. Dawe
- RTLA 11. Goldfish, Carassius auratus
Material: Two slides
Diagnosis: Neurilemmoma
Submitter: T. M. Scotti
- RTLA 12. Green turtle, Chelonia mydas
Material: Three bottles of wet tissue; 4 photographs; 2 slides
Diagnosis: Fibropapillomas
Submitter: G. H. Waddell
- RTLA 13. Shark
Material: Wet tissue; 4 slides; 2 photographs
Diagnosis: (1) Subepicardial hemorrhages in association with
lymphoid aggregates
(2) Myocardial infestation by indeterminate
organism -- possible sarcosporidia
Submitter: R. F. Mathewson
- RTLA 14. Largemouth bass, Micropterus salmoides
Material: One fish; 1 slide; 4 photographs
Diagnosis: Intra-epidermal nevus
Submitter: C. J. Dawe
- RTLA 15. Largemouth bass, Micropterus salmoides
Material: One fish; 1 slide, 5 photographs
Diagnosis: Ossifying fibroma
Submitter: C. J. Dawe

- RTLA 16. Largemouth bass, Micropterus salmoides
 Material: One fish; 4 slides; 3 photographs
 Diagnosis: Intraepithelial hyperpigmentation by numerous dendritic melanocytes in all layers of epidermis
 Submitter: C. J. Dawe
- RTLA 17. Dagger shrimp, Palaemonetes pugio
 Material: One slide
 Diagnosis: Metacercaria of Microphallus turgida infected with a haplosporidium, Urosporidium fuliginosum
 Submitter: R. W. Heard
- RTLA 18. Atlantic needlefish, Strongylura marina
 Material: Sixteen heads of fish; 3 slides; photographs
 Diagnosis: Chronic inflammation due to copepod parasites in the jaw
 Submitter: J. M. Arnold
 Reprint: Cressey, Roger F. and Bruce B. Collette. Copepods and Needlefishes: A Study in Host-Parasite Relationships. U.S. Fish Wildl. Serv. Fish. Bull., 68(3): 347-432. 1970.
- RTLA 19. Atlantic octopus, Octopus vulgaris
 Material: One paraffin embedded block; 5 slides; 2 photographs
 Diagnosis: Probable wound repair and hyperplasia in web area between the two anterior arms
 Submitter: J. M. Arnold
- RTLA 20. California sea mussel, Mytilus californianus
 Material: Two slides
 Diagnosis: Digestive gland lesions caused by haplosporidian parasites
 Submitter: R. L. Taylor
 Reprint: Taylor, Ronald L. Haplosporidium tumefacientis sp. n., the Etiologic Agent of a Disease of the California Sea Mussel, Mytilus californianus Conrad. J. Invertebr. Pathol., 8(1): 109-121. 1966.
- RTLA 21. Gaper clam, Tresus nuttalli
 Material: Two slides
 Diagnosis: Inflammatory reaction of foot muscle; associated with unclassified microbes producing exophytic lesions
 Submitter: R. L. Taylor and A. C. Smith
 Reprint: Taylor, Ronald L. and Albert C. Smith. Polypoid and Papillary Lesions in the Foot of the Gaper Clam, Tresus nuttalli. J. Invertebr. Pathol., 8(2): 264-266. 1966.
- RTLA 22. Walleye, Stizostedion vitreum vitreum
 Material: One fish; 14 slides
 Diagnosis: Lymphocystis
 Submitter: M. Stanton
- RTLA 23. Chain pickerel, Esox niger
 Material: Two slides
 Diagnosis: Parasitic infestation of gills; unclassified protozoan
 Submitter: C. J. Dawe

- RTLA 24. White sucker, Catostomus commersoni
 Material: One fish
 Diagnosis: Ovarian cyst (non-neoplastic)
 Submitter: M. Stanton
- RTLA 25. Rainbow trout, Salmo gairdneri
 Material: Three jars of gross specimens; 16 photographs
 Diagnosis: Hepatoma
 Submitter: C. E. Dunbar
- RTLA 26. Drosophila melanogaster
 Material: One block; 9 slides; 14 photographs
 Diagnosis: Melanotic lesions involving fat body
 Submitter: S. Ghelelovitch
 Reprint: Ghelelovitch, Sabbas. Effets tumorigènes de la leucine, de l'uridine et de la thymidine tritiées chez les larves de la Drosophile. C. R. Hebd. Seances Acad. Sci., Ser. D, Sci. Nat. (Paris), 262: 1173-1176. 1966.
- RTLA 27. Spruce sawfly, Diprion hercyniae
 Material: Twelve adults; 3 pupae; numerous midgut tumorlike bodies; 42 slides
 Diagnosis: Polyhedral virus infection
 Submitter: M. M. Neilson
 Reprint: Neilson, M. M. and D. E. Elgee. Tumorlike Bodies in Virus-Infected and Noninfected Adults of the Spruce Sawfly, Diprion hercyniae. J. Invertebr. Pathol., 10: 70-75. 1968.
- RTLA 28. Greater wax moth, Galleria mellonella
 Material: Three slides; 15 photographs
 Diagnosis: Whorl formations in irradiated animals by hemocytes
 Submitter: J. C. Harshbarger
 Reprint: Harshbarger, John C. and B. Shain Moore. Some Effects of X-irradiation on Larvae of Galleria mellonella. J. Invertebr. Pathol., 8(2): 277-279. 1966.
- RTLA 29. Sea lamprey, Petromyzon marinus
 Material: Two pieces of skin; 10 slides
 Diagnosis: Inflammation associated with bacterial infection
 Submitter: L. N. Allison
- RTLA 30. Planarian, Dugesia dorotocephala
 Material: Four adult planarians; 66 slides; photographs
 Diagnosis: Swellings -- dorsum of tail; indeterminate nature
 Submitter: R. Kenk
- RTLA 31. Claw-footed toad, Xenopus laevis
 Material: One block of fixed material; 4 photographs; 18 slides
 Diagnosis: Tuberculoma -- leg muscle
 Submitter: E. Elkan

- RTLA 32. Claw-footed toad, Xenopus laevis
 Material: One block of fixed material; 4 slides
 Diagnosis: Nephroblastoma
 Submitter: E. Elkan
 Reprint: Elkan, E. Three Different Types of Tumors in Salientia. Cancer Res., 23(10): 1641-1645. 1963.
- RTLA 33. Earthworm, Lumbricus terrestris
 Material: One earthworm; 10 slides; 4 photographs
 Diagnosis: Contracted scar due to injury plus multiple parasitic lesions
 Submitter: E. Holland
- RTLA 34. Painted turtle, Chrysemys picta
 Material: Head of turtle; 12 slides; 7 photographs
 Diagnosis: Otitis media with foreign body reaction
 Submitter: H. Miller
- RTLA 35. Pond snail, Physa heterostrophia
 Material: Two slides
 Diagnosis: "Cyst-like" bodies primarily on reproductive organs due to microsporidian parasite
 Submitter: E. H. Michelson
 Reprint: Michelson, Edward H. Plistophora husseyi sp. n., a Microsporidian Parasite of Aquatic Pulmonate Snails. J. Insect Pathol., 5(1): 28-38. 1963.
- RTLA 36. Bilharzia snail, Australorbis glabratus
 Material: Three slides
 Diagnosis: Tubercle-like lesions of tentacles and head region due to infection by acid-fast bacteria
 Submitter: E. H. Michelson
- RTLA 37. Pacific oyster, Crassostrea gigas
 Material: Thirty-seven slides; 4 blocks
 Diagnosis: Fibrous tumor of gonadal origin
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B. and Clyde S. Sayce. An Internal Fibrous Tumor in a Pacific Oyster Crassostrea gigas. J. Invertebr. Pathol., 10(1): 1-8. 1968.
- RTLA 38. Freshwater mussel, Anodonta californiensis
 Material: Eight slides; 1 block
 Diagnosis: Polypoid hyperplasia of submucosal glands of foot
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B. Four Freshwater Mussels (Anodonta californiensis) with Pedunculated Adenomas Arising from the Foot. J. Invertebr. Pathol., 9(4): 459-466. 1967.
- RTLA 39. Hydra
 Material: One slide
 Diagnosis: Developmental anomaly; teratogenesis (?)
 Submitter: E. Holland

- RTLA 40. Hydra
 Material: Normal; budding and degenerate growths; 14 slides;
 4 photographs
 Diagnosis: Developmental anomaly; teratogenesis (?)
 Submitter: E. Holland
- RTLA 41. Leopard frog, Rana pipiens
 Material: One kidney; 3 photographs; 10 slides
 Diagnosis: Urethane-induced renal adenocarcinoma
 Submitter: J. S. Waterhouse
- RTLA 42. Seahorse, Hippocampus sp.
 Material: One gross specimen (mass near eye); 8 slides
 Diagnosis: Parasitic lesion -- probably microsporidian
 Submitter: M. M. Sigel
- RTLA 43. European corn borer, Ostrinia nubilalis
 Material: One larva; 6 photographs; 34 slides
 Diagnosis: Pigmented cuticular projection with underlying hemocyte
 reaction
 Submitter: H. L. Zimmack
- RTLA 44. Leafhopper, Agallia constricta
 Material: Two electron photomicrographs; 6 photographs
 Diagnosis: Ganglion cells infected with wound tumor virus
 Submitter: K. Maramorosch
 Reprint: Maramorosch, K., E. Shikata, H. Hirumi, and R. R. Granados.
 Multiplication and Cytopathology of a Plant Tumor Virus in
 Insects. Natl. Cancer Inst. Monogr. 31: 493-507. 1969.
- RTLA 45. Khapra beetle, Trogoderma granarium
 Material: Six adult beetles
 Diagnosis: Cuticular deformations
 Submitter: R. G. Strong
 Reprint: Strong, R. G. On Deformities of the Khapra Beetle,
Trogoderma granarium Everts (Coleoptera: Dermestidae).
 Wasmann J. Biol., 17(2): 273-278. 1959.
- RTLA 46. Granary weevil, Sitophilus granarius
 Material: One adult weevil
 Diagnosis: Cuticular deformations
 Submitter: R. G. Strong
 Reprint: Strong, R. G. To the Teratology of the Granary Weevil,
Sitophilus granarius (Linnaeus) (Coleoptera: Curculionidae).
 Wasmann J. Biol., 17(1): 65-68. 1959.
- RTLA 47. Variegated cutworm, Peridroma saucia
 Material: One slide; 4 photographs
 Diagnosis: Granulosis virus infection showing hyperplasia, chromosome
 bridges and fragments, and multipolar filaments in the
 fat body
 Submitter: M. E. Martignoni
 Reprint: Martignoni, Mauro E. and James E. Milstead. Glutamate-
 Aspartate Transaminase Activity in the Blood Plasma of
 an Insect During the Course of Two Viral Diseases. Ann.
 Entomol. Soc. Am., 60(2): 428-431. 1967.

- RTLA 48. Variegated cutworm, Peridroma saucia
 Material: One slide
 Diagnosis: Granulosis virus infection showing nodule ("giant cell") formation in the hemocoel
 Submitter: M. E. Martignoni
 Reprint: [see RTLA 47]
- RTLA 49. Drosophila melanogaster
 Material: One slide; 2 photographs
 Diagnosis: "Brown tumors" in brown tumor strain
 Submitter: M. E. Martignoni
- RTLA 50. King crab, Limulus polyphemus
 Material: One lateral eye; 4 photographs; 42 slides
 Diagnosis: Foreign body with inflammatory reaction
 Submitter: M. L. Behrens
- RTLA 51. Crab
 Material: Portions of exoskeleton with protuberances
 Diagnosis: Undetermined
 Submitter: W. Schmitt and P. Kier
- RTLA 52. Hydra, Chlorohydra viridissima
 Material: Three vials of hydra; 19 photographs; 7 slides
 Diagnosis: Giant mutants; heterocytes; and normal individuals
 Submitter: H. M. Lenhoff
 Reprint: Lenhoff, Howard M., Charles Rutherford, and H. D. Heath. Anomalies of Growth and Form in Hydra: Polarity, Gradients, and a Neoplasia Analog. Natl. Cancer Inst. Monogr. 31: 709-737. 1969.
- RTLA 53. Queenfish, Seriplus politus
 Material: Five fish; 9 photographs; 3 slides
 Diagnosis: Focal swellings on lip; tissue too disrupted by freezing for diagnosis
 Submitter: R. C. Fay
- RTLA 54. Coral, Madrepora kauaiensis
 Material: Three photographs
 Diagnosis: Anomalous growths; neoplasia versus reaction to parasites
 Submitter: D. F. Squires
 Reprints: Squires, Donald F. Neoplasia in a Coral? Science, 148(3669): 503-505. 1965.

 White, Philip R. and John D. Soule [comments on Squires' article and Squires' rebuttal to their comments]. Science, 150(3692): 77-78. 1965.
- RTLA 55. American chameleon, Anolis carolinensis
 Material: One adult chameleon
 Diagnosis: Cyst on neck; probably inflammatory origin
 Submitter: E. C. Bay

- RTLA 56. American cockroach, Periplaneta americana
 Material: Eight slides; 8 vials of specimens; 36 photographs
 Diagnosis: Abnormal salivary glands induced by ligature or nerve severance
 Submitter: D. J. Sutherland
 Reprints: Sutherland, D. J. Experimentally Induced Tumours in Periplaneta americana L. J. Insect Physiol., 9: 131-135. 1963.

 Sutherland, Donald J. The Development of Salivary Tumours in Periplaneta americana (L.) as Induced by Duct Ligation. J. Insect Physiol., 13: 137-152. 1967.
- RTLA 57. Silver dollar or Spotted metynnis, Metynnis maculatus
 Material: Gross specimen; 7 slides; 2 photographs
 Diagnosis: Parasitic infestation (protozoan)
 Submitter: M. Stanton
- RTLA 58. Yellowfin goby, Acanthogobius flavimanus
 Material: Four fish; 9 slides; 4 photographs
 Diagnosis: Epithelial papillomas
 Submitter: Y. Ito
- RTLA 59. Crayfish, Procambarus clarki
 Material: One crayfish
 Diagnosis: Limb loss with failure of regeneration; etiology (?)
 Submitter: C. A. G. Wiersma
- RTLA 60. Leopard frog, Rana pipiens
 Material: Two slides
 Diagnosis: Renal adenocarcinoma
 Submitter: A. Granoff
- RTLA 61. Splitnose rockfish, Sebastes diploproa
 Material: Nineteen slides; 47 photographs
 Diagnosis: Lipoma
 Submitter: J. C. Harshbarger
 Reprint: Harshbarger, John C. and G. W. Bane. Case Report of a Fibrolipoma on a Rockfish, Sebastes diploproa. Natl. Cancer Inst. Monogr. 31: 219-221. 1969.
- RTLA 62. White croaker, Genyonemus lineatus
 Material: Numerous fish; slides; photographs
 Diagnosis: Epithelial papillomas
 Submitter: J. C. Harshbarger
 Reprint: Harshbarger, John C. Work of the Registry of Tumours in Lower Animals with Emphasis on Fish Neoplasms. Symp. Zool. Soc. London, No. 30: 285-303. 1972.
- RTLA 63. Giant leathery turtle, Dermochelys coriacea
 Material: Nine slides; 3 photographs
 Diagnosis: Granulomatous reaction; etiology (?)
 Submitter: J. R. Hendrickson

- RTLA 64. Nudibranch, Hermisenda crossicornis
 Material: Two electron photomicrographs
 Diagnosis: Unclassified microorganism in receptor cells
 Submitter: J. Westfall
- RTLA 65. House fly, Musca domestica
 Material: Nineteen photographs
 Diagnosis: Focal lesions in hypodermis, midgut, and fat bodies induced by carcinogenic fluorenamine derivatives
 Submitter: G. E. Cantwell
 Reprint: Shortino, Thomas J., George E. Cantwell, and W. E. Robbins. Effect of Certain Carcinogenic 2-Fluorenamine Derivatives on Larvae of the House Fly, Musca domestica Linnaeus. J. Insect Pathol., 5: 489-497. 1963.
- RTLA 66. Guppy, Poecilia reticulata
 Material: Gross specimens
 Diagnosis: Infected with gram negative rod-shaped bacteria
 Submitter: T. Kozma
- RTLA 67. Red-spotted newt, Notophthalmus viridescens
 Material: One gross specimen; 4 slides; 17 photographs
 Diagnosis: Helminth cysts
 Submitter: H. Evans
- RTLA 68. Locusta migratoria
 Material: Seven slides; 4 photographs
 Diagnosis: Gregarine parasitic infestation
 Submitter: G. Matz
- RTLA 69. Madeira cockroach, Leucophaea maderae
 Material: Two slides
 Diagnosis: Salivary reservoir lesions resulting from nerve severance
 Submitter: G. Matz
 Reprint: Matz, G. Tumeurs Expérimentales chez Leucophaea maderae F. et Locusta migratoria L. J. Insect Physiol., 6: 309-313. 1961.
- RTLA 70. Alpine newt, Triturus alpestris
 Material: Four slides
 Diagnosis: Epithelioma
 Submitter: G. Matz
 Reprint: Matz, Gilbert. Un Cas d'Épithélioma Épidermique chez Triturus alpestris Laur. (Amphibien, Salamandridé). Bull. Soc. Zool. France, 91(4): 707-708 and one Plate. 1966.
- RTLA 71. Acipenseriformes
 Material: Three specimens
 Diagnosis: Ridge scales and fin spines (fossils)
 Submitter: J. T. Gregory

- RTLA 72. Osteichthyes
 Material: Three specimens
 Diagnosis: Pachyostose operculars (fossils)
 Submitter: J. T. Gregory
- RTLA 73. American bullfrog, Rana catesbeiana
 Material: Fourteen paraffin blocks; 3 photographs; 7 slides
 Diagnosis: Inflammatory lesions
 Submitter: D. DuBois
- RTLA 74. Snapping turtle, Chelydra serpentina
 Material: Eleven paraffin blocks; 3 photographs; slides
 Diagnosis: Degenerative lesions
 Submitter: D. DuBois
- RTLA 75. Guppy, Poecilia reticulata
 Material: Thirteen fish -- 6 with thoracic teratomas; 96 slides;
 21 photographs
 Diagnosis: Teratoid anomalies
 Submitter: R. Wenk
- RTLA 76. Moon snail, Polinices lewsi
 Material: Three slides
 Diagnosis: Infection -- with inflammatory reaction
 Submitter: R. L. Taylor
 Reprint: Smith, Albert C. and Ronald L. Taylor. Tumefactions
 (Tumorlike Swellings) on the Foot of the Moon Snail
Polinices lewsi. J. Invertebr. Pathol., 10(2):
 263-268. 1968.
- RTLA 77. Rainbow trout, Salmo gairdneri
 Material: Two fish; 5 livers; 12 slides
 Diagnosis: (1) hepatomas; (2) trabecular hepatocarcinoma; and
 (3) adenocarcinoma (carcinocarcinoma)
 Submitter: J. H. Wales
 Reprint: Wales, J. H. and R. O. Sinnhuber. An Early Hepatoma
 Epizootic in Rainbow Trout, Salmo gairdneri. Calif.
 Fish Game, 52: 85-91. 1966.
- RTLA 78. Spruce budworm, Choristoneura fumiferana
 Material: Seventeen larvae and one pupa; 4 photographs
 Diagnosis: Epidermal necrosis and hyperplasia with sloughing of
 the cuticle possibly due to contact with a toxic material
 Submitter: R. L. Lyon
- RTLA 79. Crayfish, Orconectes rusticus
 Material: One slide
 Diagnosis: Duct obstruction with necrosis and inflammatory
 reaction in the hepatopancreas
 Submitter: J. Hubschman
- RTLA 80. Earthworm, Lumbricus sp.
 Material: One earthworm; 4 photographs; 10 slides
 Diagnosis: Multiple parasitic lesions
 Submitter: E. Holland

- RTLA 81. Drosophila melanogaster
 Material: Three vials of adults; 4 photographs; a list of mutants that produce melanotic tumors; descriptions of mutants causing tumors; and a list of laboratories that carry tumorous stocks and the stocks they carry
 Diagnosis: Freckled strain
 Submitter: D. L. Lindsley
- RTLA 82. Dace
 Material: One gross specimen; 7 photographs
 Diagnosis: Parasitic cyst; myxosporida suspected
 Submitter: R. D. Schick
- RTLA 83. Sea urchin test
 Material: Six photographs and x-ray films
 Diagnosis: Repair after transection of radial canals
 Submitter: G. R. Clark, II
- RTLA 84. American brook lamprey, Lampetra lamottei
 Material: One gross specimen; 8 photographs; 3 slides
 Diagnosis: Multiple granulomas in response to helminth parasites
 Submitter: J. H. Howell
- RTLA 85. Silkworm, Bombyx mori
 Material: Seven slides
 Diagnosis: Abnormal proliferation of epidermal cells in larvae infected with Tipula iridescent virus
 Submitter: T. Hukuhara
 Reprint: Hukuhara, Tosihiro. Induction of Epidermal Tumor in Bombyx mori (Linnaeus) with Tipula Iridescent Virus. J. Insect Pathol., 6: 246-248. 1964.
- RTLA 86. Brown bullhead, Ictalurus nebulosus
 Material: One fish head; 4 photographs; 2 slides
 Diagnosis: Melanoma
 Submitter: L. N. Allison
- RTLA 87. Western fence lizard, Sceloporus occidentalis
 Material: One gross lizard; 4 photographs
 Diagnosis: Infectious granuloma; bacterial origin suspected
 Submitter: C. Gans
- RTLA 88. Goldfish, Carassius auratus
 Material: Two pieces of tissue; 6 slides; 3 photographs
 Diagnosis: Fibromyxosarcoma
 Submitter: Fisheries Research Board of Canada
- RTLA 89. Sea lamprey, Petromyzon marinus
 Material: One gross lamprey; photographs; slides
 Diagnosis: Melanoma with metastases
 Submitter: J. H. Howell
 Reprint: Dawe, C. J. and J. C. Harshbarger. Neoplasms in Feral Fishes: Their Significance to Cancer Research. (see "Papers in Press" on p. 7).

- RTLA 90. Housefly, Musca domestica
 Material: Adult flies; 10 photographs
 Diagnosis: (1) melanotic tumors
 (2) melanotic sclerosis
 Submitter: R. P. Bodnaryk
 Reprint: Bodnaryk, Robert P. Dietary Amino Acid and Nucleic Acid Imbalance Leading to Altered Tumour Frequency in the Adult Housefly, Musca domestica. J. Insect Physiol., 14: 223-242. 1968.
- RTLA 91. Blue gourami, Trichogaster trichopterus
 Material: Three blocks of tissue; 15 photographs; 16 slides
 Diagnosis: Granulomatous inflammatory reaction involving gut, spleen, and liver
 Submitter: D. O. Carpenter
- RTLA 92. Butter clam, Saxidomus giganteus
 Material: One clam; 1 photograph; 10 slides; 2 blocks
 Diagnosis: Polypoid developmental anomaly of foot
 Submitter: G. Pauley
 Reprint: [see RTLA 136]
- RTLA 93. Walleye, Stizostedion vitreum vitreum
 Material: Head of fish; 5 photographs; 9 slides
 Diagnosis: Multiple fibrosarcomas with ossification
 Submitter: L. N. Allison
- RTLA 94. Painted turtle, Chrysemys picta
 Material: One gross turtle; 14 photographs
 Diagnosis: Epidermoid cyst on neck
 Submitter: K. Potter
- RTLA 95. Garter snake, Thamnophis sirtalis
 Material: Two slides
 Diagnosis: (1) fibropapilloma
 (2) sertoli cell tumor
 Submitter: L. Karstad
- RTLA 96. Fox snake, Elaphe vulpina
 Material: One snake with abdominal mass
 Diagnosis: Pararenal hematoma
 Submitter: C. Gans
- RTLA 97. Mud puppy, Necturus maculosus
 Material: One kidney; 6 photographs; 6 slides
 Diagnosis: Undifferentiated renal neoplasm; probably metastatic
 Submitter: C. H. Nauman
- RTLA 98. Redtailed black shark, Labeo bicolor
 Material: One gross fish; 14 photographs; 7 slides
 Diagnosis: Infectious granuloma
 Submitter: J. A. Zgurzynski

- RTLA 99. Bloater, Coregonus hoyi
 Material: Rear half of fish; 8 photographs; 3 slides
 Diagnosis: Spindle cell sarcoma (possible neural origin)
 Submitter: L. N. Allison
- RTLA 100. Clematis blister beetle, Epicauta cinerea
 Material: Gross specimens of gut; 15 slides; 12 photographs
 Diagnosis: Hyperplastic outgrowths on midgut; etiology undetermined
 Submitter: A. P. Gupta
 Reprint: Gupta, A. P. Midgut lesions in Epicauta cinerea
 (Coleoptera: Meloidae). Ann. Entomol. Soc. Am., 63:
 1786-1788. 1970.
- RTLA 101. Black crappie, Pomoxis nigromaculatus
 Material: One fish
 Diagnosis: Lipoma; with large growth in anterior abdominal region
 Submitter: G. W. Camenisch
- RTLA 102. Planarian, Dugesia dorotocephala
 Material: One gross specimen; photographs
 Diagnosis: Abnormal regeneration
 Submitter: M. Jenkins
- RTLA 103. Spot, Leiostomus xanthurus
 Material: One fish; 5 photographs; 19 slides
 Diagnosis: Anterior abdominal tumor produced by a microsporidian
 Submitter: V. Sprague
 Reprint: Sprague, Victor. Microsporidia and Tumors with
 Particular Reference to the Lesion Associated with
Ichthyosporidium sp. Schwartz, 1963. Natl. Cancer
 Inst. Monogr. 31: 237-249. 1969.
- RTLA 104. Earthworm, Lumbricus sp.
 Material: One earthworm; 4 photographs
 Diagnosis: Secondary tail of 15 segments
 Submitter: E. Holland
- RTLA 105. Coho salmon, Oncorhynchus kisutch
 Material: One fish fillet; 8 photographs; 10 slides
 Diagnosis: Neurofibroma
 Submitter: W. G. Yoder
- RTLA 106. Lingcod, Ophiodon elongatus
 Material: Segment of animal with dorsal fin; 5 photographs; 2 slides
 Diagnosis: Lymphocystis
 Submitter: Fisheries Research Board of Canada
- RTLA 107. Sydney rock oyster (Australian), Crassostrea commercialis
 Material: Twenty photographs; 17 slides
 Diagnosis: Papillary epitheliomas of the mantle
 Submitter: P. H. Wolf
 Reprint: Wolf, Peter H. Neoplastic Growth in Two Sydney Rock
 Oysters, Crassostrea commercialis (Iredale and Roughley).
 Natl. Cancer Inst. Monogr. 31: 563-573. 1969.

- RTLA 108. Pacific oyster, Crassostrea gigas
 Material: Four slides
 Diagnosis: Ganglioneuromas; watery cyst
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B., Albert K. Sparks, and Clyde S. Sayce.
 An Unusual Internal Growth Associated with Multiple
 Watery Cysts in a Pacific Oyster (Crassostrea gigas).
 J. Invertebr. Pathol., 11(3): 398-405. 1968.
- RTLA 109. Claw-footed toad, Xenopus laevis
 Material: Fifteen slides
 Diagnosis: Granulomatous disease containing acid-fast bacteria
 Submitter: L. N. Ruben
 Reprint: Ruben, L. N., M. Balls, J. Stevens, and N. S. Rafferty.
 A New Transmissible Disease in the South African Clawed
 Toad, Xenopus laevis. Oncology, 23: 228-237. 1969.
- RTLA 110. Giant conch, Strombus gigas
 Material: Two slides
 Diagnosis: Inflammatory reaction; cause indeterminate
 Submitter: M. M. Sigel
- RTLA 111. Moray
 Material: Two slides
 Diagnosis: Nonsuppurative panniculitis
 Submitter: M. M. Sigel
- RTLA 112. Northern pike, Esox lucius
 Material: Gross specimens from the jaws and trunks; 3 slides
 Diagnosis: Lymphosarcomas
 Submitter: M. F. Mulcahy
 Reprint: Mulcahy, Maire F., Goesta Winqvist, and Clyde J. Dawe.
 The Neoplastic Cell Type in Lymphoreticular Neoplasms of
 the Northern Pike, Esox lucius L. Cancer Res., 30(11):
 2712-2717. 1970.
- RTLA 113. Box turtle, Terrapene carolina
 Material: Three slides
 Diagnosis: Ear infection
 Submitter: W. Dix
- RTLA 114. Coral, several species
 Material: Twenty-one photographs
 Diagnosis: Anomalous growths; neoplasia versus reaction to parasites
 Submitter: D. F. Squires
- RTLA 115. Mud clam, Mya arenaria
 Material: Seven slides
 Diagnosis: Papillary lesions at pedal orifice
 Submitter: P. R. Nelson
- RTLA 116. Boa constrictor, Boa constrictor
 Material: Two bottles of tissue; 45 slides; 8 photographs
 Diagnosis: Infectious granulomas of indeterminate etiology
 Submitter: B. L. Burge

- RTLA 117. Cobra, Naja naja
 Material: Heart and tumor-like growth of specimen
 Diagnosis: Fibrinous pericarditis and subepicardial myocarditis
 Submitter: W. E. Haast
- RTLA 118. Largescale sucker, Catostomus macrocheilus
 Material: Specimen of anal fin; 7 photographs; 2 slides
 Diagnosis: Papillary epithelioma (non-invasive)
 Submitter: J. R. Adams
- RTLA 119. Planarians, Dugesia and Crenobia
 Material: Seven slides
 Diagnosis: Histopathologic effects of insecticides
 Submitter: H. An der Lan
 Reprint: An der Lan, Hannes. Histopathologische Auswirkungen von Insektiziden (DDT und Sevin) bei Wirbellosen und ihre cancerogene Beurteilung. Mikroskopie, 17: 85-112. 1962.
- RTLA 120. Water snake, Xenochrophis piscator
 Material: Nine slides; 8 photographs
 Diagnosis: Granulomas
 Submitter: P. Zwart
- RTLA 121. Green turtle, Chelonia mydas
 Material: Six bottles of specimens; 5 slides; 27 photographs
 Diagnosis: Fibroma
 Submitter: A. C. Smith
- RTLA 122. Skipjack tuna, Euthynnus pelamis
 Material: Two photographs; 2 slides
 Diagnosis: Puffy snout disease (fibrosis and inflammation)
 Submitter: J. C. Marr
- RTLA 123. Mountain pine beetle, Dendroctonus ponderosae
 Material: Three beetles with cuticular vesicle on elytral declivities
 Diagnosis: Possible physical trauma in emergence
 Submitter: G. D. Amman
- RTLA 124. Firemouth, Cichlasoma meeki
 Material: One fish; 2 slides; 11 photographs
 Diagnosis: Mechanical injury
 Submitter: H. McCarthy
- RTLA 125. Pilot black snake, Elaphe obsoleta obsoleta
 Material: One snake; 9 slides; 7 photographs
 Diagnosis: Infectious granuloma
 Submitter: R. Tuck, Jr.
- RTLA 126. Edible shrimp, Penaeus aztecus
 Material: Two gross specimens; 10 photographs
 Diagnosis: Ulcerative ventral lesion posterior to walking legs
 Submitter: R. Neal

- RTLA 127. Northern pike, Esox lucius
 Material: Three slides
 Diagnosis: Lymphosarcoma
 Submitter: R. F. Nigrelli
 Reprint: Nigrelli, Ross F. Spontaneous Neoplasms in Fishes. III. Lymphosarcoma in Astyanax and Esox. Zoologica (N. Y.), 32(2): 101-108. 1947.
- RTLA 128. Lightning bug, Photurus sp.
 Material: Four specimens; 5 photographs
 Diagnosis: Late stage of wound repair
 Submitter: M. McLean
- RTLA 129. Bullhead, Ictalurus sp.
 Material: Gross specimen; 17 slides; 6 photographs
 Diagnosis: Melanoma
 Submitter: J. J. Christian
- RTLA 130. Neotropical race runner, Cnemidophorus lemniscatus
 Material: Gross specimen; 24 photographs; 9 slides
 Diagnosis: Multiple infectious bacterial granuloma
 Submitter: R. Tuck, Jr.
- RTLA 131. Hydrazoid, Bimera sp.
 Material: Gross specimen; 6 photographs
 Diagnosis: Pending
 Submitter: H. Park
- RTLA 132. Freshwater mussel, Anodonta californiensis
 Material: Nine gross specimens
 Diagnosis: Polypoid hyperplasia
 Submitter: G. B. Pauley; Reprint: [see RTLA 140]
- RTLA 133. Freshwater mussel, Anodonta oregonensis
 Material: Gross specimen
 Diagnosis: Polypoid hyperplasia
 Submitter: G. B. Pauley; Reprint: [see RTLA 140]
- RTLA 134. Oyster, Crassostrea gigas
 Material: Gross specimen
 Diagnosis: Large watery cyst anterior to heart
 Submitter: G. B. Pauley; Reprint: [see RTLA 108]
- RTLA 135. Oyster, Crassostrea gigas
 Material: One slide
 Diagnosis: Endematous mesenchymal tumor
 Submitter: G. B. Pauley and A. K. Sparks; Reprint: Sparks, Albert K., Gilbert B. Pauley, and Kenneth K. Chew. A Second Mesenchymal Tumor From a Pacific Oyster (Crassostrea gigas). Proc. Natl. Shellfish. Assoc., 59: 35-39. 1969.
- RTLA 136. Smooth Washington clam, Saxidomus giganteus
 Material: Two slides; 1 block
 Diagnosis: Polypoid tumor on foot
 Submitter: G. B. Pauley; Reprint: Pauley, Gilbert B. A Butter Clam (Saxidomus giganteus) with a Polypoid-Tumor on the Foot. J. Invertebr. Pathol., 9(4): 577-579. 1967.

- RTLA 137. Freshwater mussel, Margaritifera margaritifera
 Material: Two slides; 1 block
 Diagnosis: Polypoid tumor on foot
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B. A Disease of the Freshwater Mussel, Margaritifera margaritifera. J. Invertebr. Pathol., 12(3): 321-328. 1968.
- RTLA 138. Freshwater mussel, Margaritifera margaritifera
 Material: One slide; 2 blocks
 Diagnosis: Polypoid tumor on foot
 Submitter: G. B. Pauley
 Reprint: [see RTLA 140]
- RTLA 139. Freshwater mussel, Margaritifera margaritifera
 Material: One slide; 1 block
 Diagnosis: Polypoid tumor on foot
 Submitter: G. B. Pauley
 Reprint: [see RTLA 140]
- RTLA 140. Freshwater mussel, Anodonta oregonensis
 Material: One slide
 Diagnosis: Incipient polypoid tumors on foot
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert. A Critical Review of Neoplasia and Tumor-Like Lesions in Mollusks. Natl. Cancer Inst. Monogr. 31: 509-539. 1969.
- RTLA 141. Freshwater mussel, Anodonta californiensis
 Material: Three slides
 Diagnosis: Edematous hyperplasia of gill
 Submitter: G. B. Pauley
 Reprint: [see RTLA 140]
- RTLA 142. Freshwater mussel, Anodonta californiensis
 Material: Six slides
 Diagnosis: (1) Polypoid tumor on foot
 (2) Hyperplasia on gill
 Submitter: G. B. Pauley
 Reprint: [see RTLA 140]
- RTLA 143. Freshwater mussel, Anodonta californiensis
 Material: One slide; 4 blocks
 Diagnosis: Incipient polypoid tumors on foot
 Submitter: G. B. Pauley
 Reprint: [see RTLA 38]
- RTLA 144. Freshwater mussel, Anodonta californiensis
 Material: Seven slides including 3 autoradiographs
 Diagnosis: Polypoid tumors on foot
 Submitter: G. B. Pauley
 Reprint: [see RTLA 38]

- RTLA 145. Freshwater mussel, Anodonta californiensis
 Material: Two slides
 Diagnosis: Polypoid tumors on foot
 Submitter: G. B. Pauley
 Reprint: [see RTLA 38]
- RTLA 146. Freshwater mussel, Margaritifera margaritifera
 Material: Nine slides; 9 blocks
 Diagnosis: Edematous cysts "spongy disease"
 Submitter: G. B. Pauley
 Reprint: [see RTLA 137]
- RTLA 147. Soft-shell clam, Mya arenaria
 Material: Three slides
 Diagnosis: Fungiform smooth muscle tumor on siphon
 Submitter: G. B. Pauley and T. Cheng
 Reprint: Pauley, Gilbert B. and Thomas C. Cheng. A Tumor on the Siphons of a Soft-Shell Clam, Mya arenaria. J. Invertebr. Pathol., 11(3): 504-506. 1968.
- RTLA 148. Freshwater mussel, Gonidea angulata
 Material: Four slides; 2 blocks
 Diagnosis: Polypoid tumor on foot
 Submitter: G. B. Pauley
 Reprint: [see RTLA 140]
- RTLA 149. Freshwater mussel, Gonidea angulata
 Material: Five slides; 1 block
 Diagnosis: Polypoid tumor on foot with collagenous stroma
 Submitter: G. B. Pauley
 Reprint: [see RTLA 140]
- RTLA 150. American oyster, Crassostrea virginica
 Material: One paraffin block; 9 slides
 Diagnosis: Mesenchymal neoplasms; possibly reticulum cell sarcomas
 Submitter: J. A. Couch
 Reprint: Couch, J. A. Sarcoma-Like Disease in a Single Specimen of the American Oyster. In: Comparative Leukemia Research 1969, Bibl. haemat., No. 36, R. M. Dutcher (ed.), p. 647 (Karger, Basel/München/Paris/New York 1970). (Abstract).
- RTLA 151. Sydney rock oyster, Crassostrea commercialis
 Material: Five slides; 1 photograph
 Diagnosis: Epithelial papilloma
 Submitter: P. H. Wolf
 Reprint: [see RTLA 107]
- RTLA 152. Sydney rock oyster, Crassostrea commercialis
 Material: Three slides; 2 paraffin blocks; 1 photograph
 Diagnosis: Epithelial papilloma
 Submitter: P. H. Wolf
 Reprint: [see RTLA 107]

- RTLA 153. Pacific oyster, Crassostrea gigas
 Material: Two slides
 Diagnosis: Mesenchymal tumor
 Submitter: A. K. Sparks
 Reprint: Sparks, Albert K., Gilbert B. Pauley, Richard R. Bates, and Clyde S. Sayce. A Mesenchymal Tumor in a Pacific Oyster, Crassostrea gigas (Thunberg). J. Insect Pathol., 6(4): 448-452. 1964.
- RTLA 154. Pacific oyster, Crassostrea gigas
 Material: Two slides
 Diagnosis: Fecal impaction; possibly due to congenital stenosis
 Submitter: A. K. Sparks
 Reprint: Sparks, Albert K., Gilbert B. Pauley, Richard R. Bates, and Clyde S. Sayce. A Tumorlike Fecal Impaction in a Pacific Oyster, Crassostrea gigas (Thunberg). J. Insect Pathol., 6(4): 453-456. 1964.
- RTLA 155. Littleneck clam, Venerupis staminea
 Material: One slide
 Diagnosis: Infestation with larval cestode, Echeneibothrium sp.
 Submitter: A. K. Sparks
 Reprint: Sparks, Albert K. and Kenneth K. Chew. Gross Infestation of the Littleneck Clam, Venerupis staminea, with a Larval Cestode (Echeneibothrium sp.). J. Invertebr. Pathol., 8(3): 413-416. 1966.
- RTLA 156. Smallmouth bass, Micropterus dolomieu
 Material: One excised tumor; 4 slides; 4 photographs
 Diagnosis: Fibrovascular tumor; lymphangioma (?); mesothelioma (?)
 Submitter: W. G. Yoder
- RTLA 157. Pacific cod, Gadus macrocephalus
 Material: Gross specimens; 21 slides; 7 photographs
 Diagnosis: Adenoma of parabranhial body -- tentative diagnosis based on poorly fixed tissue
 Submitter: C. D. Levings
- RTLA 158. Earthworm, Lumbricus terrestris
 Material: Fourteen slides
 Diagnosis: Epithelioma-like lesion following cold injury
 Submitter: H. I. Firminger
 Reprint: Firminger, H. I., Sandra Antoine, and Elijah Adams. Epithelioma-Like Lesion in Lumbricus terrestris After Cold Injury. Natl. Cancer Inst. Monogr. 31: 645-653. 1969.
- RTLA 159. Planarian, Dugesia dorotocephala
 Material: Seven slides
 Diagnosis: "Curly-tail disease" -- intranuclear inclusion bodies in some neoblasts are suspected as being viruses
 Submitter: C. J. Dawe
 Reprint: Dawe, Clyde J. Invertebrate Animals in Cancer Research. GANN Monogr. 5: 45-55. 1968.

- RTLA 160. Sydney rock oyster, Crassostrea commercialis
 Material: One gross specimen
 Diagnosis: Papillary epithelioma of mantle
 Submitter: P. H. Wolf
 Reprint: [see RTLA 107]
- RTLA 161. Sydney rock oyster, Crassostrea commercialis
 Material: One gross specimen; 1 photograph
 Diagnosis: Papillary epithelioma of mantle
 Submitter: P. H. Wolf
 Reprint: [see RTLA 107]
- RTLA 162. Sydney rock oyster, Crassostrea commercialis
 Material: One gross specimen; 1 photograph
 Diagnosis: Papillary epithelioma of mantle
 Submitter: P. H. Wolf
 Reprint: [see RTLA 107]
- RTLA 163. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen; 3 slides; 8 photographs
 Diagnosis: (1) lymphocystis
 (2) dermal sarcoma
 Submitter: R. Walker
 Reprint: Walker, Roland. Lymphocystis Warts and Skin Tumors of Walleyed Pike. Rensselaer Rev. Grad. Studies, No. 14, pp. 1-5, Rensselaer Polytechnic Institute, Troy, N.Y. 1958.
- RTLA 164. Walleye, Stizostedion vitreum vitreum
 Material: Three paraffin blocks; 2 slides
 Diagnosis: Epithelioma
 Submitter: R. Walker
 Reprints: Walker, Roland. Virus Associated with Epidermal Hyperplasia in Fish. Natl. Cancer Inst. Monogr. 31: 195-207. 1969.
 Walker, Roland. Epidermal Hyperplasia in Fish: Two Types Without Visible Virus. Natl. Cancer Inst. Monogr. 31: 209-213. 1969.
- RTLA 165. English sole, Parophrys vetulus
 Material: Four groups of gross specimens
 Diagnosis: Cuticular papillomas
 Submitter: R. C. Cooper and C. A. Keller
 Reprint: Cooper, Robert C. and Carl A. Keller. Epizootiology of Papillomas in English Sole, Parophrys vetulus. Natl. Cancer Inst. Monogr. 31: 173-185. 1969.
- RTLA 166. Ramirez's dwarf cichlid, Apistogramma ramirezi
 Material: One gross specimen; 5 photographs; 3 slides
 Diagnosis: Lymphocystis
 Submitter: R. Kanazawa

- RTLA 167. Eastern coral snake, Micrurus fulvius fulvius
 Material: Two pieces of tissue; 6 photographs; 12 slides
 Diagnosis: Acute necrotizing pneumonitis with multiple small abscesses
 Submitter: W. E. Haast
- RTLA 168. Sea hare, Aplysia californica
 Material: Gross specimen; 28 slides
 Diagnosis: Obstructed albumen gland (?)
 Submitter: D. O. Carpenter
- RTLA 169. Earthworm, Lumbricus sp.
 Material: One gross specimen; 6 photographs; 10 slides
 Diagnosis: Supernumerary clitellum
 Submitter: E. Holland
- RTLA 170. Skipjack tuna, Euthynnus pelamis
 Material: Gross specimen; 5 photographs; 3 slides
 Diagnosis: Hematoma; no infection; blood cells broken down indicating rather old condition
 Submitter: J. C. Marr
- RTLA 171. American oyster, Crassostrea virginica
 Material: Six panels with 43 specimens of shells with abnormalities of growth and malformations in the shell; 1 photograph
 Diagnosis: Panel 1. Normal shells
 Panel 2. Shift in direction of the principle axis of growth
 Panel 3. Repair of shell injuries
 Panel 4. Formation of cysts
 Panel 5. Massive calcite deposits and pearl-like structures
 Panel 6. Abnormal growth of right valve
 Submitter: P. S. Galtsoff
 Reprint: Galtsoff, Paul S. Anomalies and Malformations in the Shells of Crassostrea virginica. Natl. Cancer Inst. Monogr. 31: 575-580. 1969.
- RTLA 172. Leopard frog, Rana pipiens
 Material: Twelve slides; 1 gross specimen; 1 photograph; 1 summary sheet of research program; and 1 list of frog kidney tumor specimens available at Trinity College, Washington, D.C.
 Diagnosis: Renal adenocarcinoma
 Submitter: G. S. King
- RTLA 173. Angelfish, Pterophyllum scalare
 Material: Two slides
 Diagnosis: Lymphocystis
 Submitter: M. M. Sigel
- RTLA 174. Moray
 Material: Four slides
 Diagnosis: Granulomatous inflammatory reaction; etiology unknown
 Submitter: M. M. Sigel

- RTLA 175. Conch
 Material: Seven slides
 Diagnosis: Indeterminant
 Submitter: M. M. Sigel
- RTLA 176. Bloater, Coregonus hoyi
 Material: Two fish (dressed); 11 photographs; 11 slides
 Diagnosis: Myxomatous lesion induced by unidentified organism
 Submitter: L. N. Allison
- RTLA 177. White sucker, Catostomus commersoni
 Material: One gross animal; 2 photographs
 Diagnosis: Boil-like lesion containing protozoan parasites; myxosporidia suspected
 Submitter: R. D. Schick
- RTLA 178. Discus fish, Symphysodon discus
 Material: One gross specimen; 3 photographs
 Diagnosis: Inflammation and necrosis in muscle due to mixed infection of bacteria and protozoa (microsporidia suspected)
 Submitter: R. D. Schick
- RTLA 179. Iguana iguana
 Material: One gross autopsy specimen; 5 photographs including x-ray; 2 slides
 Diagnosis: Osteodystrophy
 Submitter: R. B. Northway
- RTLA 180. Corn earworm, Heliothis zea
 Material: Five 35 mm slides of histology sections from various organs
 Diagnosis: Infection with nuclear polyhedrosis virus of Trichoplusia ni
 Submitter: G. E. Cantwell
- RTLA 181. Cabbage looper, Trichoplusia ni
 Material: Six 35 mm slides of histology sections from various organs
 Diagnosis: T. ni with 2 polyhedrosis viruses
 Submitter: G. E. Cantwell
- RTLA 182. Zebra caterpillar, Ceramica picta
 Material: Four 35 mm slides of histology sections from various organs
 Diagnosis: Nuclear polyhedrosis infection
 Submitter: G. E. Cantwell
- RTLA 183. Silkworm, Bombyx mori
 Material: One 35 mm slide
 Diagnosis: Cytoplasmic polyhedrosis virus
 Submitter: G. E. Cantwell
- RTLA 184. Corn earworm, Heliothis zea
 Material: One 35 mm slide
 Diagnosis: Cytoplasmic virus of gut epithelium
 Submitter: G. E. Cantwell

- RTLA 185. Saltmarsh caterpillar, Estigmene acrea
Material: One 35 mm slide
Diagnosis: Granulosis virus of fat body
Submitter: G. E. Cantwell
- RTLA 186. Fir-shoot roller, Choristoneura murinana
Material: One 35 mm slide
Diagnosis: Granulosis virus of fat body cells of fourth instar larva
Submitter: G. E. Cantwell
- RTLA 187. Cockchafer, Melelontha sp.
Material: One 35 mm slide
Diagnosis: Nosema disease
Submitter: G. E. Cantwell
- RTLA 188. Larch sawfly, Pristiphora erichsonii
Material: Two 35 mm slides
Diagnosis: Bacillus cereus penetrating the gut in the vicinity of point of attachment of hindgut to posterior portion of midgut
Submitter: G. E. Cantwell
- RTLA 189. European cockchafer, Melelontha sp.
Material: One 35 mm slide
Diagnosis: Spores of Bacillus popilliae in the blood
Submitter: G. E. Cantwell
- RTLA 190. Silkworm, Bombyx mori
Material: Two 35 mm slides
Diagnosis: Effects of crystals of B. thuringiensis on gut 15 minutes after feeding and change in the midgut 55 minutes after crystal ingestion
Submitter: G. E. Cantwell
- RTLA 191. Crane fly, Tipula paludosa
Material: One 35 mm slide
Diagnosis: Fat body cells of larva infected with Rickettsiella tipulae
Submitter: G. E. Cantwell
- RTLA 192. Mediterranean flour moth, Anagasta kuehniella
Material: One 35 mm slide
Diagnosis: Section of A. kuehniella two days after infection by B. cereus
Submitter: G. E. Cantwell
- RTLA 193. Rhinoceros beetle, Oryctes rhinoceros
Material: One 35 mm slide
Diagnosis: Beauveria tenella infection
Submitter: G. E. Cantwell
- RTLA 194. Oryctes nasicornis
Material: One 35 mm slide
Diagnosis: Beauveria tenella infection
Submitter: G. E. Cantwell

- RTLA 195. Rhinoceros beetle, Oryctes rhinoceros
 Material: One 35 mm slide
 Diagnosis: Metarrhizium anisopliae infection
 Submitter: G. E. Cantwell
- RTLA 196. Larch sawfly, Pristiphora erichsonii
 Material: One 35 mm slide
 Diagnosis: Normal larch sawfly
 Submitter: G. E. Cantwell
- RTLA 197. Coho salmon, Oncorhynchus kisutch
 Material: One gross specimen; photographs; 3 slides
 Diagnosis: Fibrolipoma
 Submitter: L. N. Allison
- RTLA 198. Drosophila melanogaster
 Material: Eleven slides
 Diagnosis: Five slides -- st tubw adults
 Three slides -- plus wild type adults
 Three slides -- larval cross sections
 Submitter: J. H. Sang
 Reprint: Sang, James H. Biochemical Basis of Hereditary Melanotic Tumors in Drosophila. Natl. Cancer Inst. Monogr. 31: 291-301. 1969.
- RTLA 199. Guppy, Poecilia reticulata
 Material: Three whole specimens
 Diagnosis: Teratoid anomalies
 Submitter: R. Wenk
- RTLA 200. Giant toad, Bufo marinus
 Material: One live toad
 Diagnosis: Lymphatic cyst on top of head
 Submitter: C. Gans
- RTLA 201. Red-eared turtle, Chrysemys scripta elegans
 Material: One live turtle
 Diagnosis: Epidermoid cyst under left eye with bacterial infection
 Submitter: W. Frair
- RTLA 202. Sockeye salmon, Oncorhynchus nerka
 Material: One adult salmon
 Diagnosis: Fibroma
 Submitter: N. Boyce
- RTLA 203. Coho salmon, Oncorhynchus kisutch
 Material: One adult coho salmon; 3 photographs
 Diagnosis: Lymphosarcoma
 Submitter: N. Boyce
- RTLA 204. Mummichog, Fundulus heteroclitus
 Material: Six slides
 Diagnosis: Fibroma
 Submitter: P. P. Yevich

- RTLA 205. American bullfrog, Rana catesbeiana
Material: One slide
Diagnosis: Acute and chronic inflammation associated with bacterial colonies involving liver and muscle
Submitter: E. L. Cooper and B. S. Baculi
- RTLA 206. Western toad, Bufo boreas
Material: One slide
Diagnosis: Fibroma
Submitter: E. L. Cooper and B. S. Baculi
- RTLA 207. Frog, Rana montezumae
Material: One slide
Diagnosis: Splenic infarcts
Submitter: E. L. Cooper and B. S. Baculi
- RTLA 208. Shrimp, Palaemon sp.
Material: One shrimp
Diagnosis: Parasitized by an isopod, Bopyrus sp.
Material: G. O'Coner
- RTLA 209. Edible shrimp, Penaeus aztecus
Material: Nine gross specimens; 5 normal controls
Diagnosis: Inflammation, repair and regeneration
Submitter: R. A. Neal
- RTLA 210. Shrimp, Penaeus setiferus
Material: Nine gross specimens; 5 normal controls
Diagnosis: Inflammation, repair and regeneration
Submitter: R. A. Neal
- RTLA 211. Praying mantis
Material: Wet tissue; 10 slides
Diagnosis: Granulomas
Submitter: G. E. Cosgrove
- RTLA 212. Bull shark, Carcharhinus leucas
Material: Gross specimen; 20 slides
Diagnosis: Fibroma
Submitter: M. Walker, G. Zubrod, and P. W. Gilbert
- RTLA 213. Longnose sucker, Catostomus catostomus
Material: Three whole fish
Diagnosis: Normal
Submitter: R. W. Hinz
- RTLA 214. Firebellied newt, Cynops pyrrhogaster
Material: Six slides; 1 photograph
Diagnosis: Nephroblastoma
Submitter: P. Zwart
Reprint: Zwart, P. A Nephroblastoma in a Fire-bellied Newt, Cynops pyrrhogaster. Cancer Res., 30: 2691-2694. 1970.

- RTLA 215. Pacific oyster, Crassostrea gigas
 Material: Ten slides; 4 blocks
 Diagnosis: Probable epithelioma of the mantle with conchiolin formation
 Submitter: G. B. Pauley and C. S. Sayce
 Reprint: Pauley, Gilbert B. and Clyde S. Sayce. An Invasive Epithelial Neoplasm in a Pacific Oyster, Crassostrea gigas. J. Natl. Cancer Inst., 49(3): 897-902. 1972.
- RTLA 216. Brook trout, Salvelinus fontinalis
 Material: Two slides
 Diagnosis: Lymphosarcoma
 Submitter: C. E. Dunbar
 Reprint: Dunbar, Clarence E. Lymphosarcoma of Possible Thymic Origin in Salmonid Fishes. Natl. Cancer Inst. Monogr. 31: 167-171. 1969.
- RTLA 217. Rainbow trout, Salmo gairdneri
 Material: One slide
 Diagnosis: Nephroblastoma
 Submitter: C. E. Dunbar
 Reprint: [see RTLA 62]
- RTLA 218. Croaker
 Material: Gross specimen; 3 photographs
 Diagnosis: Exostosis versus osteoma
 Submitter: J. P. Summerour
- RTLA 219. Gudgeon, Gobio gobio
 Material: Five slides; one 35 mm slide
 Diagnosis: Squamous cell carcinoma
 Submitter: L. E. Mawdesley-Thomas
 Reprint: Mawdesley-Thomas, Lionel E. and David Bucke. Squamous Cell Carcinoma in a Gudgeon (Gobio gobio, L.). Pathol. Vet., 4: 484-489. 1967.
- RTLA 220. Bream, Abramis brama
 Material: Four slides; two 35 mm slides
 Diagnosis: Lipoma
 Submitter: L. E. Mawdesley-Thomas
 Reprint: Mawdesley-Thomas, Lionel E. and D. Bucke. A Lipoma in a Bream (Abramis brama L.) Vet. Rec., 82: 673-674. 1968.
- RTLA 221. Roach, Rutilus rutilus
 Material: Four slides
 Diagnosis: Fish pox
 Submitter: L. E. Mawdesley-Thomas
 Reprint: Mawdesley-Thomas, Lionel E. and David Bucke. Fish Pox in the Roach (Rutilus rutilus L.). Vet. Rec., 81(2): 56-57. 1967.
- RTLA 222. Mummichog, Fundulus heteroclitus
 Material: Four slides and blocks
 Diagnosis: Granulomas
 Submitter: P. P. Yevich

- RTLA 223. Sydney rock oyster, Crassostrea commercialis
 Material: Two photographs; 6 slides
 Diagnosis: Papilloma of mantle
 Submitter: P. H. Wolf
 Reprint: Wolf, Peter H. Unusually Large Tumor in a Sydney Rock Oyster. J. Natl. Cancer Inst., 46(5): 1079-1084. 1971.
- RTLA 224. American oyster, Crassostrea virginica
 Material: Thirteen slides
 Diagnosis: Hematopoietic neoplasms
 Submitter: C. A. Farley
 Reprint: Farley, C. Austin. Probable Neoplastic Disease of the Hematopoietic System in Oysters, Crassostrea virginica and Crassostrea gigas. Natl. Cancer Inst. Monogr. 31: 541-555. 1969.
- RTLA 225. Pacific oyster, Crassostrea gigas
 Material: Three slides
 Diagnosis: Hematopoietic neoplasms
 Submitter: C. A. Farley
 Reprint: [see RTLA 224]
- RTLA 226. Broad-banded copperhead, Agkistrodon contortrix laticinctus
 Material: One piece of lung tissue; 3 photographs
 Diagnosis: Excessive mucus and sloughing in bronchus with gram positive bacterial infection; satisfactory cause of death not determined
 Submitter: W. E. Haast
- RTLA 227. Odonata (dragonfly) naiads
 Material: Four specimens
 Diagnosis: Subcutaneous lithiasis; etiology unknown
 Submitter: H. R. Hepburn
- RTLA 228. Atlantic eel, Anguilla vulgaris
 Material: Gross specimens; 10 slides; photographs
 Diagnosis: Epithelial papillomas
 Submitter: B. F. Deys
 Reprint: Deys, B. F. Papillomas in the Atlantic Eel, Anguilla vulgaris. Natl. Cancer Inst. Monogr. 31: 187-193. 1969.
- RTLA 229. Drosophila melanogaster
 Material: A live strain
 Diagnosis: tuB₃
 Submitter: C. Barigozzi
 Reprint: Barigozzi, C. Genetic Control of Melanotic Tumors in Drosophila. Natl. Cancer Inst. Monogr. 31: 277-290. 1969.
- RTLA 230. Blacktail platy, Xiphophorus sp., probably a hybrid between X. maculatus and X. helleri
 Material: Twenty gross specimens; photographs
 Diagnosis: Melanoma with invasion of underlying muscle
 Submitter: I. L. Gorman

- RTLA 231. Indigo snake, Drymarchon corais couperi
 Material: One piece of tissue; photographs
 Diagnosis: Granuloma with totally necrotic center
 Submitter: Unknown
- RTLA 232. Red-spotted newt, Notophthalmus viridescens
 Material: Two slides; blocks
 Diagnosis: Nematode parasite in pancreas
 Submitter: G. E. Cosgrove
- RTLA 233. Hellbender, Cryptobranchus alleganiensis
 Material: One slide; two 35 mm slides; 1 piece of wet tissue
 Diagnosis: Adenoma of seminiferous epithelium
 Submitter: G. E. Cosgrove
 Reprint: Cosgrove, G. E. and J. C. Harshbarger. Testicular Tumor in a Salamander. J. Am. Vet. Med. Assoc., 159(5): 582. 1971.
- RTLA 234. Iguana iguana
 Material: Three 35 mm slides; blocks; 1 slide
 Diagnosis: Chronic abscess of the subcutaneous tissue of the left mandibular area; culture of abscess contents positive for Klebsiella sp.
 Submitter: G. E. Cosgrove
- RTLA 235. Blue mussel, Mytilus edulis
 Material: Three slides
 Diagnosis: Lymphoma
 Submitter: C. A. Farley
 Reprint: Farley, C. Austin. Sarcomatoid Proliferative Disease in a Wild Population of Blue Mussels (Mytilus edulis). J. Natl. Cancer Inst., 43(2): 509-516. 1969.
- RTLA 236. Slatepencil urchin, Heterocentrotus mammillatus
 Material: Sea-urchin spine with appendage
 Diagnosis: Developmental anomaly
 Submitter: A. C. Smith
- RTLA 237. Sea hare, Aplysia californica
 Material: One gross specimen
 Diagnosis: Granuloma -- caused by a fungus
 Submitter: D. O. Carpenter
- RTLA 238. Claw-footed toad, Xenopus laevis
 Material: Two gross kidney specimens
 Diagnosis: (1) Gastro-pancreatic carcinoma
 (2) Kidney carcinoma plus tubercles containing acid-fast bacteria
 Submitter: E. Elkan
 Reprint: Elkan, E. A Spontaneous Anaplastic Intestinal Metastasising Carcinoma in a South African Clawed Toad (Xenopus laevis Daudin). J. Pathol. Bacteriol., 100(3): 205-207. 1970.

- RTLA 239. Caecilian, Caecilia tentaculata
 Material: Gross specimen of soft tissue under tongue
 Diagnosis: Normal
 Submitter: E. H. Taylor
- RTLA 240. Half-toed gecko, Hemidactylus frenatus
 Material: One gross specimen; photographs
 Diagnosis: Infectious granuloma with necrotic center containing bacteria
 Submitter: R. G. Tuck, Jr.
- RTLA 241. American shad, Alosa sapidissima
 Material: Four slides; 2 photographs
 Diagnosis: Chronic inflammatory reaction, repair and scarring at the site of an old wound
 Submitter: R. W. Warner
 Reprint: Warner, Ronald W. and Stanley C. Katkansky. An Inflammatory Lesion in an American Shad, Alosa sapidissima. J. Fish. Res. Board Can., 27(1): 191-193. 1970.
- RTLA 242. Sockeye salmon, Oncorhynchus nerka
 Material: One adult salmon
 Diagnosis: Rhabdomyosarcoma
 Submitter: N. Boyce
- RTLA 243. Blue crab, Callinectes sapidus
 Material: One right chela
 Diagnosis: Cuticular cyst at joint of claw
 Submitter: J. A. Couch
- RTLA 244. Freshwater clam, Strophitus undulatus
 Material: One clam
 Diagnosis: Glocchidia
 Submitter: W. Lener
- RTLA 245. Planarian, Dactyligera muscula
 Material: Six gross specimens
 Diagnosis: Anomalous regeneration; etiology unknown
 Submitter: R. Kenk
- RTLA 246. Malayan pit viper, Caloselasma rhodostoma
 Material: Two slides
 Diagnosis: Oral sepsis; phlegmonous cellulitis
 Submitter: E. Elkan
- RTLA 247. Guppy, Poecilia reticulata
 Material: Gross specimens
 Diagnosis: Multiple granulomas of liver; possible degeneration of spinal cord
 Submitter: R. Wenk
- RTLA 248. Chinook salmon, Oncorhynchus tshawytscha
 Material: Head of one fish
 Diagnosis: Fibroameloblastoma
 Submitter: J. H. Wales

- RTLA 249. Drosophila melanogaster, tu(83.9)bw strain
 Material: Gross specimens; slides; photographs
 Diagnosis: (1) Normal
 (2) Melanotic tumors
 Submitter: J. H. Sang
 Reprint: Sang, James H. Biochemical Basis of Hereditary Melanotic
 Tumors in Drosophila. Natl. Cancer Inst. Monogr. 31:
 291-301. 1969.
- RTLA 250. Earthworm, Lumbricus sp.
 Material: Gross specimens
 Diagnosis: Granulomatous reaction to parasite (nematode suspected)
 Submitter: E. Holland
- RTLA 251. Photuris sp.
 Material: Eleven gross specimens
 Diagnosis: Incomplete; variety of teratologies, parasitic and microbial
 infections
 Submitter: M. McLean
- RTLA 252. Earthworm, Lumbricus sp.
 Material: One gross specimen
 Diagnosis: Hyperplasia and displasia of clitellar epithelium in
 response to nematode parasite
 Submitter: E. Holland
- RTLA 253. Darkblotched rockfish, Sebastes crameri
 Material: One slide; 2 lantern slides
 Diagnosis: Follicular and papillary carcinoma of the thyroid
 Submitter: M. Katz
- RTLA 254. Lingcod, Ophiodon elongatus
 Material: One slide; 2 lantern slides
 Diagnosis: Lymphocystis
 Submitter: M. Katz
- RTLA 255. Herring
 Material: One slide
 Diagnosis: Hydatiform cysts of cyclophyllid tapeworms
 Submitter: M. Katz
- RTLA 256. Sucker, Deltistes sp.
 Material: Three slides
 Diagnosis: Subcutaneous fibroma
 Submitter: M. Katz
- RTLA 257. Bloater, Coregonus hoyi
 Material: One gross specimen
 Diagnosis: Olfactory neuroepithelioma
 Submitter: L. N. Allison
- RTLA 258. Coho salmon, Oncorhynchus kisutch
 Material: One slide; 2 lantern slides
 Diagnosis: Neurofibroma
 Submitter: M. Katz

- RTLA 259. Chinook salmon, Oncorhynchus tshawytscha
 Material: Photographs
 Diagnosis: Fibroameloblastomas
 Submitter: M. Katz
 Reprint: Schlumberger, Hans G. and Max Katz. Odontogenic Tumors of Salmon, Cancer Res., 16(4): 369-370. 1956.
- RTLA 260. Fish
 Material: Three photographs; one gross specimen
 Diagnosis: Fibroma
 Submitter: M. Katz
- RTLA 261. Coho salmon, Oncorhynchus kisutch
 Material: One x-ray of jaw
 Diagnosis: Ossifying fibroma or osteogenic sarcoma
 Submitter: M. Katz
- RTLA 262. Earthworm, Lumbricus sp.
 Material: One gross specimen
 Diagnosis: Nematode infection
 Submitter: E. Holland
- RTLA 263. Caecilian, Caecilia tentaculata
 Material: Two vials of tissue
 Diagnosis: Hemangioma
 Submitter: E. H. Taylor
- RTLA 264. Dover sole, Microstomus pacificus
 Material: Two whole specimens and tissue from another specimen
 Diagnosis: Epidermal papilloma with chronic sub-epithelial inflammatory reaction
 Submitter: J. S. Laurie
- RTLA 265. Ratfish, Hydrolagus colliei
 Material: Four claspers
 Diagnosis: Inflammatory cells and fibrous tissue in response to fungal infection
 Submitter: J. S. Laurie
- RTLA 266. Flying lizard, Draco
 Material: One gross specimen
 Diagnosis: Presumptive subdermal infectious granuloma
 Submitter: S. Campden-Main
- RTLA 267. Cutthroat trout, Salmo clarki
 Material: Three slides
 Diagnosis: Leukemia
 Submitter: C. E. Smith
 Reprint: Smith, Charlie E. An Undifferentiated Hematopoietic Neoplasm with Histologic Manifestations of Leukemia in a Cutthroat Trout (Salmo clarki). J. Fish. Res. Board Can., 28(1): 112-113. 1971.

- RTLA 268. Coho salmon, Oncorhynchus kisutch
 Material: Viscera
 Diagnosis: Neurofibroma or neurilemmoma
 Submitter: L. Margolis
- RTLA 269. Apple snail, Ampullarius australis
 Material: One slide; 1 photograph
 Diagnosis: Adenomatous neoplasm associated with an inflammatory reaction
 Submitter: K. Krieg
 Reprint: Krieg, K. Ampullarius australis d'Orbigny (Mollusca, Gastropoda) as Experimental Animal in Oncological Research. A Contribution to the Study of Cancerogenesis in Invertebrates. Neoplasma 19(1): 41-49. 1972.
- RTLA 270. Freshwater planarian, Planaria dactyligera musculosa
 Material: Three gross specimens; 1 block containing 3 planarians
 Diagnosis: Anomalous regeneration; etiology unknown
 Submitter: R. Kenk
- RTLA 271. South American red-eared turtle, Chrysemys scripta callirostris (one specimen; Common red-eared turtle, Chrysemys scripta elegans (2 specimens)
 Material: Three live specimens
 Diagnosis: Dermatitis
 Submitter: A. Graves
- RTLA 272. Red-spotted newt, Notophthalmus viridescens
 Material: One gross specimen; 2 photographs
 Diagnosis: Muscle disintegration due to nerve injury or mesenchymal cell neoplasm
 Submitter: E. R. Burns
 Reprint: Burns, E. Robert and Harold J. White. A Spontaneous Mesenchymal Cell Neoplasm in the Adult Newt, Diemictylus viridescens. Cancer Res., 31: 826-829. 1971.
- RTLA 273. Bloater, Coregonus hoyi
 Material: Three gross specimens
 Diagnosis: Myxomatous lesion induced by unidentified organism
 Submitter: L. N. Allison
- RTLA 274. Praying mantis
 Material: Four slides; 2 gross specimens
 Diagnosis: Black areas on cuticle
 Submitter: G. E. Cosgrove
- RTLA 275. Timber rattlesnake, Crotalus horridus horridus
 Material: Two slides; blocks
 Diagnosis: (1) Spleen: reticuloendothelial hyperplasia
 (2) Intestines: acute ulcerative enteritis
 (3) Wall of stomach and intestines: granuloma (parasitic); one contains larval cestode; one contains nematode
 Submitter: G. E. Cosgrove

- RTLA 276. Guppy (blue delta strain), Poecilia reticulata
Material: Thirteen gross specimens; 23 slides
Diagnosis: Acute bacterial infection with multiple granulomas
in the mesentary and pancreatic tissue
Submitter: J. G. Bennett
- RTLA 277. Channel catfish, Ictalurus punctatus
Material: Two whole fish
Diagnosis: Multiple encysted larvae of tapeworms (Cestoda),
probably of genus Proteocephalus involving visceral
serosal surface
Submitter: W. W. Tullner
- RTLA 278. Leopard frog, Rana pipiens
Material: Two slides of spleen
Diagnosis: Infectious granuloma
Submitter: D. J. Olson and E. L. Cooper
- RTLA 279. Leopard frog, Rana pipiens
Material: Two slides of tissue with parasitic lesions
Diagnosis: Granulomatous reaction to trematode parasites
Submitter: D. J. Olson and E. L. Cooper
- RTLA 280. Crayfish, Orconectes rusticus
Material: Six slides of crayfish antennal gland
Diagnosis: Uric acid crystals
Submitter: J. Hubschman
- RTLA 281. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Inflammatory lesion
Submitter: G. G. Combs
- RTLA 282. Leopard frog, Rana pipiens
Material: Six slides and photographs
Diagnosis: Lucké renal adenocarcinoma
Submitter: C. Snell
- RTLA 283. Coho salmon, Oncorhynchus kisutch
Material: One complete fish head
Diagnosis: Tissue too autolyzed for diagnosis
Submitter: L. N. Allison
- RTLA 284. Coho salmon, Oncorhynchus kisutch
Material: Gills
Diagnosis: Thyroid tumor undergoing massive necrosis
Submitter: L. N. Allison
- RTLA 285. Mosquito, Anopheles annulipes
Material: Three whole specimens; 8 slides
Diagnosis: Infection of salivary gland by Pseudomonas bacteria
Submitter: J. D. Briggs

- RTLA 286. Coho salmon, Oncorhynchus kisutch
 Material: A tumor from a adult female
 Diagnosis: Fibroma
 Submitter: D. G. MacLean
- RTLA 287. Earthworm, Lumbricus sp.
 Material: One worm
 Diagnosis: Bacterial infection with an encapsulating granuloma reaction
 Submitter: H. L. Zimmack
- RTLA 288. Brown bullhead, Ictalurus nebulosus
 Material: One whole fish
 Diagnosis: Epithelial carcinoma; granulomas in the liver
 Submitter: G. G. Combs
- RTLA 289. Brown bullhead, Ictalurus nebulosus
 Material: One fish head
 Diagnosis: Epidermal papilloma
 Submitter: G. G. Combs
- RTLA 290. Yellow bullhead, Ictalurus natalis
 Material: One fish head and viscera
 Diagnosis: Injury and wound repair
 Submitter: G. G. Combs
- RTLA 291. Sail lizard, Hydrosaurus amboinensis
 Material: Eighteen slides
 Diagnosis: Leucocyte infiltrations in liver, kidneys, lungs, heart and spleen; leukemia
 Submitter: P. Zwart
 Reprint: Zwart, P. and J. C. Harshbarger. Hematopoietic Neoplasms in Lizards: Report of a Typical Case in Hydrosaurus amboinensis and of a Probable Case in Varanus salvator. Int. J. Cancer, 9: 548-553. 1972.
- RTLA 292. Striped bass, Morone saxatilis
 Material: One piece of tissue; 24 slides
 Diagnosis: Nephroblastoma
 Submitter: C. F. Helmboldt
 Reprint: Helmboldt, C. F. and D. S. Wyand. Nephroblastoma in a Striped Bass. J. Wildl. Dis., 7: 162-165. 1971.
- RTLA 293. Spiny-headed worm, Macracanthorhynchus hirudinaceus
 Material: One worm
 Diagnosis: Bacterial infection of damaged cuticle
 Submitter: J. T. DeBell
- RTLA 294. Surf clam, Spisula solidissima
 Material: One clam
 Diagnosis: Neuroma, neurofibroma, or fibroma
 Submitter: W. Smith

- RTLA 295. Pacific hagfish, Eptatretus stouti
Material: Ten slides
Diagnosis: Leucocyte infiltration in response to a fungal infection
Submitter: D. S. Linthicum
- RTLA 296. Rainbow trout, Salmo gairdneri
Material: Four slides
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: Ashley, Laurence M. Pathology of Fish Fed Aflatoxins and Other Antimetabolites. In: A Symposium on Diseases of Fishes and Shellfishes, Stanislas F. Snieszko (ed.), pp. 366-379. (American Fisheries Society, Special Publication No. 5, Washington 1970).
- RTLA 297. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 298. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 299. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Proliferation of bile duct and tubules
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 300. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Diffuse necrosis
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 301. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Proliferation of bile duct
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 302. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Acidophilic nodules
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 303. Brook trout, Salvelinus fontinalis
Material: Three slides
Diagnosis: Myxoma and granuloma
Submitter: L. M. Ashley

- RTLA 304. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 305. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Reticulocytoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 306. Rainbow trout, Salmo gairdneri
Material: Three slides
Diagnosis: Normal stomach and intestine with trophozoite stages
of Entameba salmonis
Submitter: L. M. Ashley
- RTLA 307. Rainbow trout, Salmo gairdneri
Material: Two slides
Diagnosis: Reticulocytoma (?)
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 308. Rainbow trout, Salmo gairdneri
Material: Two slides
Diagnosis: Advanced hepatoma with spread to caeca and pyloric
stomach
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 309. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Reticulocytoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 310. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma with cystic cholangitis and inflammation
of liver
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 311. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Adenocarcinoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 312. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

- RTLA 313. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Adenocarcinoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 314. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 315. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Nephroblastoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 316. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Incipient hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 317. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 318. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 319. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 320. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatitis with necrosis and hyperemia
Submitter: L. M. Ashley
Reprint: [see RTLA 296]
- RTLA 321. Rainbow trout, Salmo gairdneri
Material: One slide
Diagnosis: Hepatoma
Submitter: L. M. Ashley
Reprint: [see RTLA 296]

- RTLA 322. Rainbow trout, Salmo gairdneri
 Material: One slide
 Diagnosis: Incipient hepatoma
 Submitter: L. M. Ashley
 Reprint: [see RTLA 296]
- RTLA 323. Rainbow trout, Salmo gairdneri
 Material: One slide
 Diagnosis: Hepatoma
 Submitter: L. M. Ashley
 Reprint: [see RTLA 296]
- RTLA 324. Rainbow trout, Salmo gairdneri
 Material: One slide
 Diagnosis: Incipient hepatoma
 Submitter: L. M. Ashley
 Reprint: [see RTLA 296]
- RTLA 325. Rainbow trout, Salmo gairdneri
 Material: One slide
 Diagnosis: Nephroblastoma
 Submitter: L. M. Ashley
 Reprint: [see RTLA 296]
- RTLA 326. Rainbow trout, Salmo gairdneri
 Material: Two slides
 Diagnosis: Nephroblastoma
 Submitter: L. M. Ashley
 Reprint: [see RTLA 296]
- RTLA 327. Dwarf clawed frog, Hymenochirus boettgeri
 Material: Seven live frogs
 Diagnosis: Developmental anomalies
 Submitter: R. Wenk
- RTLA 328. Brown bullhead, Ictalurus nebulosus
 Material: Gross specimen with oral papillary growth
 Diagnosis: Epidermal papilloma; granulomas in liver
 Submitter: G. G. Combs
- RTLA 329. Hooked mussel, Brachidontes recurvus
 Material: Two gross specimens with mantle lesions
 Diagnosis: Dermal granuloma
 Submitter: A. C. Smith
 Reprint: Smith, Albert C. and Ronald L. Taylor. Preliminary Results of Marine Pathology Study Off the Florida Coast. Mar. Technol. Soc. J., 6(3): 51-52. 1972.
- RTLA 330. Fish
 Material: Cleithrum with growth
 Diagnosis: Osteophyte
 Submitter: A. C. Smith
 Reprint: [see RTLA 329]

- RTLA 331. Sheepshead, Archosargus probatocephalus
Material: Enlarged ovaries
Diagnosis: Multiple granulomas
Submitter: A. C. Smith
- RTLA 332. Sugar trout
Material: Viscera showing nodules on esophagus and stomach
Diagnosis: Multiple granulomas in response to gram negative rod-shaped bacteria
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 333. Sheepshead, Archosargus probatocephalus
Material: Caudal fins with maculae
Diagnosis: Lymphocystis
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 334. Sheepshead, Archosargus probatocephalus
Material: Liver with darkly colored wound
Diagnosis: Hemorrhage
Submitter: A. C. Smith
- RTLA 335. Rock (stone?) crab
Material: Cephalothorax with white mottling.
Diagnosis: Externally infested with protozoa
Submitter: A. C. Smith
- RTLA 336. Horseshoe crab, Limulus polyphemus
Material: Gross specimen with cuticular wound near left eye
Diagnosis: Indeterminant
Submitter: A. C. Smith
- RTLA 337. Sea squirt
Material: Tunicate with barnacles attached
Diagnosis: Thinning or atrophy and condensation of the tunic at the juncture with the barnacles
Submitter: A. C. Smith
- RTLA 338. Spotted eel
Material: Two pieces of body wall with dark (hemorrhagic) lesions
Diagnosis: Granuloma
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 339. Crab
Material: Gross specimen with soft white area on right carapace
Diagnosis: External surface infected with protozoa and bacteria
Submitter: A. C. Smith
- RTLA 340. Amphioxus, Branchiostoma caribaeum
Material: Gross specimen with darkened ventral depression near head
Diagnosis: Ulcerated area
Submitter: A. C. Smith
Reprint: [see RTLA 329]

- RTLA 341. Sand dollar, Dendraster eccentricus
Material: Portion of animal with wound
Diagnosis: Pending
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 342. Goby
Material: Gross specimen with swelling around the vent
Diagnosis: Rectal fistula with prolapse of anal mucosa and herniation of pancreas
Submitter: A. C. Smith
- RTLA 343. Pinfish, Lagodon rhomboides
Material: Two gross specimens with elevated white lesions on the head
Diagnosis: Parasitic cyst and inflammation
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 344. Sea hare, Aplysia dactylomela
Material: Two pieces of parapodia with white lesions
Diagnosis: No significant histologic abnormality
Submitter: A. C. Smith
- RTLA 345. Starfish, Astropecten (?) sp.
Material: One gross specimen with asymmetrical color pattern
Diagnosis: No significant histologic abnormality
Submitter: A. C. Smith
- RTLA 346. Colonial tunicate with sponge
Material: Gross specimen with darkening of tunic at point of attachment with sponge
Diagnosis: Tunic has collections of excretory microphages
Submitter: A. C. Smith
- RTLA 347. Sponge
Material: Two pieces with coarse gray mottling
Diagnosis: No significant histologic abnormality
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 348. Sponge
Material: Two species of sponges growing together; interface surface is thinner and lighter than unshared surface
Diagnosis: Pending
Submitter: A. C. Smith
- RTLA 349. Fiddler crab, Uca pugilator
Material: Gross specimen with black protrusion on third left walking leg
Diagnosis: Brown pigmentation of cuticle; probably resulting from previous injury
Submitter: A. C. Smith
Reprint: [see RTLA 329]

- RTLA 350. Fiddler crab, Uca pugilator
Material: Three gross specimens with darkened areas on ventral cuticle
Diagnosis: Thickened cuticular laminae; no explanation
Submitter: A. C. Smith
- RTLA 351. Turtle (Green sea?) Chelonia mydas (?)
Material: Two enlarged lymph pumps
Diagnosis: No significant histologic abnormality
Submitter: A. C. Smith
- RTLA 352. Hermit crab, Pagurus sp.
Material: Gross specimen with abdominal swellings
Diagnosis: Thickened irregular focus in exoskeleton
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 353. Pen shell
Material: Two pieces of mantle with black shiny growths
Diagnosis: Pearl forming cyst on mantle
Submitter: A. C. Smith
- RTLA 354. Worm, Nereis (?) sp.
Material: Gross specimen with abrupt change in pigmentation
Diagnosis: Normal testis
Submitter: A. C. Smith
- RTLA 355. Sea hare, Aplysia sp.
Material: Gross specimen with wound in parapodium
Diagnosis: Bacterial growth and necrosis under skin fold
Submitter: A. C. Smith
- RTLA 356. Sea hare, Aplysia dactylomela
Material: Piece of tissue with soft elevated growth
Diagnosis: Developmental anomaly; all cells normal
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 357. Sea hare, Aplysia sp.
Material: Gross specimen with pale patches
Diagnosis: Subepidermal edema
Submitter: A. C. Smith
- RTLA 358. Sea hare, Aplysia dactylomela
Material: Gross specimen with large growth on right parapodium
Diagnosis: Developmental anomaly
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 359. Sea anemone
Material: Gross specimen with brown protrusions on column
Diagnosis: Normal ova
Submitter: A. C. Smith

RTLA 360. Jellyfish

Material: Piece of tissue from bell containing dark bodies
Diagnosis: No histological lesion; gross diagnosis --
 canicular system obstructed with sand
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 361. Starfish (9-rayed)

Material: Ray missing a dorsal spine
Diagnosis: No histological lesion
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 362. Red grouper, Epinephelus morio

Material: Viscera showing parasites
Diagnosis: Suspected parasites are impacted pyloric caeca
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 363. Red grouper, Epinephelus morio

Material: Viscera showing parasitic worms
Diagnosis: Worms; unidentified
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 364. Black sea bass, Centropristis striata

Material: Gross specimen with soft swelling anterior to dorsal fin
Diagnosis: Collection of proteinaceous edema believed to occur
 normally with the seasonal development of the testis
Submitter: A. C. Smith

RTLA 365. Sea hare, Aplysia dactylomela

Material: Gross specimen with an adhesion
Diagnosis: Developmental anomaly of parapodium
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 366. Red grouper, Epinephelus morio

Material: Five pieces of liver with darkened areas
Diagnosis: Hemorrhage
Submitter: A. C. Smith

RTLA 367. Jellyfish

Material: Pieces of bell showing abnormal wrinkling
Diagnosis: Manifestation of dehydration
Submitter: A. C. Smith
Reprint: [see RTLA 329]

RTLA 368. Sea hare, Aplysia dactylomela

Material: Piece of parapodium with deep crypts
Diagnosis: Crypts extra deep, but otherwise normal
Submitter: A. C. Smith

- RTLA 369. Colonial tunicate
Material: Piece of tissue containing dark body
Diagnosis: Parasite infection
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 370. Horseshoe crab, Limulus polyphemus
Material: Gross specimen with dark brown lesions on spine
Diagnosis: Pending
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 371. Colonial tunicate
Material: Two pieces of tissue (each from a different species of tunicate) containing foreign material
Diagnosis: Parasite infection
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 372. Colonial tunicate
Material: Pieces of tissue from several animals containing foreign material
Diagnosis: Sand suspected
Submitter: A. C. Smith
- RTLA 373. Spanish mackerel, Scomberomorus maculatus
Material: Pieces of body wall from several animals with copepod parasites
Diagnosis: Acute inflammatory reaction with foreign body giant cells
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 374. Spanish mackerel, Scomberomorus maculatus
Material: Two pieces of body wall with wound
Diagnosis: Acute inflammatory reaction similar to response seen at site of copepod attachment
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 375. Spanish mackerel, Scomberomorus maculatus
Material: Heads and body walls from several animals with multiple small protrusions
Diagnosis: Cyst containing multiple spores of a parasite (coccidia)
Submitter: A. C. Smith
Reprint: [see RTLA 329]
- RTLA 376. Sheephead, Archosargus probatocephalus
Material: Gill with enlarged filament
Diagnosis: Contains parasitic worms
Submitter: A. C. Smith
Reprint: [see RTLA 329]

- RTLA 377. Sheephead, Archosargus probatocephalus
Material: Liver with dark region
Diagnosis: Normal liver and pancreas containing hemosiderin deposits
Submitter: A. C. Smith
- RTLA 378. Timber rattlesnake, Crotalus horridus horridus
Material: Wet tissue
Diagnosis: Lymphoblastic leukemia
Submitter: L. A. Griner
- RTLA 379. Rhinoceros viper, Bitis nasicornis
Material: Twelve slides
Diagnosis: Lymphosarcoma
Submitter: L. A. Griner
- RTLA 380. American bullfrog, Rana catesbeiana
Material: Two slides of parathyroid glands
Diagnosis: Huge cyst containing colloid-like substance
Submitter: E. L. Cooper
- RTLA 381. Drosophila melanogaster
Material: One slide
Diagnosis: Non-invasive imaginal disk tumor
Submitter: E. Gateff
Reprint: Gateff, Elisabeth and Howard A. Schneiderman. Neoplasms in Mutant and Cultured Wild-Type Tissues of Drosophila. Natl. Cancer Inst. Monogr. 31: 365-397. 1969.
- RTLA 382. Drosophila melanogaster
Material: One slide
Diagnosis: Invasive; imaginal disks are abnormal in appearance and size
Submitter: E. Gateff
Reprint: [see RTLA 381]
- RTLA 383. Drosophila melanogaster
Material: One slide
Diagnosis: Invasive cells, ganglion mother cells, and neuroblast cells
Submitter: E. Gateff
Reprint: [see RTLA 381]
- RTLA 384. Brown bullhead, Ictalurus nebulosus
Material: Fillet with external growths
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 385. Brown bullhead, Ictalurus nebulosus
Material: One head - one cm growth in corner of upper lip
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

- RTLA 386. Yellow bullhead, Ictalurus natalis
Material: Gross specimen with small protrusion near left pectoral fin
Diagnosis: Epidermal (mucus cell) papilloma
Submitter: G. G. Combs
- RTLA 387. Yellow bullhead, Ictalurus natalis
Material: Gross specimen with multiple raised lesions on dorsal and ventral surface of head
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 388. Brown bullhead, Ictalurus nebulosus
Material: Rear portion of fish with one cm growth on anal fin
Diagnosis: Early lipoma
Submitter: G. G. Combs
- RTLA 389. Brown bullhead, Ictalurus nebulosus
Material: Rear portion of fish with two protrusions anterior to rear dorsal fin
Diagnosis: Early lipoma
Submitter: G. G. Combs
- RTLA 390. Yellow bullhead, Ictalurus natalis
Material: Gross specimen with growth in left corner of mouth on lower lip
Diagnosis: Fibrocartilage nodule; possibly caused by injury
Submitter: G. G. Combs
- RTLA 391. Brown bullhead, Ictalurus nebulosus
Material: Fish head with soft lesion in right corner of mouth on lower lip
Diagnosis: Epidermal hyperplasia
Submitter: G. G. Combs
- RTLA 392. Brown bullhead, Ictalurus nebulosus
Material: Fish head with one cm growth in floor of mouth
Diagnosis: Epidermal carcinoma
Submitter: G. G. Combs
- RTLA 393. Brown bullhead, Ictalurus nebulosus
Material: Fish head with small lesion on upper lip
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 394. Brown bullhead, Ictalurus nebulosus
Material: Fish head with lesion inside mouth in upper left corner
Diagnosis: Epithelial carcinoma
Submitter: G. G. Combs
- RTLA 395. Brown bullhead, Ictalurus nebulosus
Material: Fish head with lesion inside left corner of mouth
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

- RTLA 396. Brown bullhead, Ictalurus nebulosus
Material: Fish tail with small lesion on right side
Diagnosis: Fibrous hyperplasia adjacent to ulcerated area
Submitter: G. G. Combs
- RTLA 397. Yellow bullhead, Ictalurus natalis
Material: Fish midsection with slightly raised lateral lesion
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 398. Brown bullhead, Ictalurus nebulosus
Material: Fish head with slightly raised dorsal lesion
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 399. Brown bullhead, Ictalurus nebulosus
Material: Fish head and thorax with multiple slightly raised lesions
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 400. Frillfin goby, Bathygobius soporator
Material: Gross specimen; growths on pectoral fin, jaw, and dorsum
Diagnosis: Hyperplastic epidermis; no invasion
Submitter: N. Rothman Feinberg
- RTLA 401. Warmouth, Lepomis gulosus
Material: Gross specimen
Diagnosis: Non-diagnostic
Submitter: J. S. Laurie
- RTLA 402. Chain pickerel, Esox niger
Material: Gross specimen
Diagnosis: Non-diagnostic
Submitter: J. S. Laurie
- RTLA 403. Pickerel and Leopard frog hybrid, Rana palustris x pipiens
Material: Gross specimen with enlarged testis
Diagnosis: Teratocarcinoma
Submitter: J. D. Hardy, Jr.
Reprint: Hardy, J. D., Jr. and J. Gillespie. Hybridization Between Rana pipiens and Rana palustris in a Modified Natural Environment. Chesapeake Sci. (in press).
- RTLA 404. White croaker, Genyonemus lineatus
Material: Gross specimen with two oral growths
Diagnosis: Epidermal papilloma
Submitter: K. P. Lindstrom
- RTLA 405. White croaker, Genyonemus lineatus
Material: Gross specimen with oral growth
Diagnosis: Epidermal papilloma
Submitter: K. P. Lindstrom

- RTLA 406. Yellow bullhead, Ictalurus natalis
Material: Four slides and posterior portion of fish with dermal lesion
Diagnosis: Cutaneous hemangioma or capillary hemangioma of the skin
Submitter: C. J. Dawe and B. J. Sanders
- RTLA 407. Snail
Material: Gross specimen with protuberance behind head
Diagnosis: Developmental defect
Submitter: J. C. Stinson
- RTLA 408. Leopard frog, Rana pipiens
Material: Two slides
Diagnosis: Hepatic necrosis
Submitter: E. Elkan
- RTLA 409. Trinidad leaf frog, Phyllomedusa trinitatis
Material: One slide
Diagnosis: Renal mycosis
Submitter: E. Elkan
- RTLA 410. White's tree frog, Hyla caerulea
Material: One slide
Diagnosis: Kidney showing multiple granulomas due to fungal infection; lesions contain numerous giant cells
Submitter: E. Elkan
- RTLA 411. Nyctimystes kubori
Material: One slide
Diagnosis: Myxosporidiosis
Submitter: E. Elkan
- RTLA 412. Nyctimystes daymanio
Material: One slide
Diagnosis: A cestode -- Myxobolus
Submitter: E. Elkan
- RTLA 413. Flathead sole, Hippoglossoides elassodon
Material: Gross specimen with growth on eyed-side
Diagnosis: Epithelial papilloma; no invasion
Submitter: J. S. Laurie
- RTLA 414. Clingfish, Sicyogaster maeandricus
Material: Gross specimen with abnormal area behind head
Diagnosis: Epidermal hyperplasia in response to parasitic ova
Submitter: J. S. Laurie
- RTLA 415. Flathead sole, Hippoglossoides elassodon
Material: Gross specimen with large growth on tail fin
Diagnosis: Epidermal papilloma
Submitter: J. S. Laurie

- RTLA 416. Ratfish, Hydrolagus colliei
 Material: Tissue from region of left pectoral fin with growth;
 2 slides
 Diagnosis: Myxosarcoma
 Submitter: J. S. Laurie
- RTLA 417. Flathead sole, Hippoglossoides elassodon
 Material: Gross specimen with growth on posterior part
 of dorsal fin
 Diagnosis: Papilloma; angioepithelial nodule
 Submitter: J. S. Laurie
- RTLA 418. Square-marked toad, Bufo regularis
 Material: Gross specimen with soft lump posterior to left eye
 Diagnosis: Granuloma containing very small gram positive rod-
 shaped bacteria
 Submitter: R. Crombie
- RTLA 419. Dwarf-clawed frog, Hymenochirus boettgeri
 Material: Twelve gross specimens with supernumerary legs
 Diagnosis: Developmental anomalies
 Submitter: R. Wenk
- RTLA 420. Dwarf-clawed frog, Hymenochirus boettgeri
 Material: Gross specimen with growth on lip
 Diagnosis: Inflammatory lesion containing acid-fast bacteria
 Submitter: R. Wenk
- RTLA 421. Quahog, Mercenaria mercenaria or Venus mercenaria
 Material: Two bottles of tissue
 Diagnosis: Normal tissue
 Submitter: A. C. Schmeer
- RTLA 422. Spot, Leiostomus xanthurus
 Material: Gross specimen with tumor at base of dorsal fin
 Diagnosis: Abnormal fat deposit possibly early lipoma
 Submitter: D. E. Ritchie
- RTLA 423. Chinook salmon, Oncorhynchus tshawytscha
 Material: Fish head with large firm dorsal growth and a small
 soft growth inside operculum
 Diagnosis: Large tumor -- fibrolipoma; small tumor -- parasitic
 lesion containing myxosporidia -- genus Henneguya
 Submitter: J. H. Wales
- RTLA 424. Tokay gecko, Gekko gecko
 Material: Head with raised area behind left eye
 Diagnosis: Granuloma in response to Actinomyces
 Submitter: B. L. Burge
- RTLA 425. English sole, Parophrys vetulus
 Material: Gross specimen with multiple small lesions near fins
 Diagnosis: Multiple granulomas adjacent to parasitic worms
 Submitter: J. S. Laurie

- RTLA 426. Flathead sole, Hippoglossoides elassodon
 Material: Gross specimen with growth involving middle half of non-pigmented side
 Diagnosis: Epidermal papilloma
 Submitter: J. S. Laurie
- RTLA 427. Flathead sole, Hippoglossoides elassodon
 Material: Gross specimen with tumor on tail fin
 Diagnosis: Epidermal papilloma
 Submitter: J. S. Laurie
- RTLA 428. Western diamondback rattler, Crotalus atrox
 Material: Cyst-like growth from liver
 Diagnosis: Granuloma due to large gram-positive rod-shaped bacteria
 Submitter: J. T. Self
- RTLA 429. Western diamondback rattler, Crotalus atrox
 Material: Tissue -- growth from dorsal musculature
 Diagnosis: Mycotic granuloma
 Submitter: J. T. Self
- RTLA 430. Coho salmon, Oncorhynchus kisutch
 Material: Two pieces of tissue
 Diagnosis: Sarcoma of probable peripheral nerve sheath origin
 Submitter: G. R. Bell
- RTLA 431. Atlantic salmon, Salmo salar
 Material: Gross specimen with growth on gills
 Diagnosis: Probable thyroid carcinoma; autolysis too advanced for definitive diagnosis
 Submitter: J. W. Saunders
- RTLA 432. Pencilfish, Poecilobrycon harrisoni
 Material: Gross specimen with doughnut-shaped lesion around vent
 Diagnosis: Anal epithelioma
 Submitter: S. H. Weitzman
- RTLA 433. Goldfish, Carassius auratus
 Material: Gross specimen with multiple cuticular lesions
 Diagnosis: Schlumberger's neurilemmoma versus fibrosarcoma
 Submitter: B. M. Levy
 Reprint: Duncan, Thomas E. and James C. Harkin. Electron Microscopic Studies of Goldfish Tumors Previously Termed Neurofibromas and Schwannomas. Am. J. Pathol., 55(2): 191-202. 1969.
- RTLA 434. Goldfish, Carassius auratus
 Material: Gross specimen with multiple cuticular lesions
 Diagnosis: Schlumberger's neurilemmoma versus fibrosarcoma
 Submitter: B. M. Levy
 Reprint: [see RTLA 433]

- RTLA 435. Leopard frog, Rana pipiens
 Material: Two slides
 Diagnosis: Teratoma
 Submitter: J. C. Streett
 Reprint: Streett, J. Clark. A Note on a Teratoma Occurring in the Leopard Frog. Tex. J. Sci., 16(4): 493. 1964.
- RTLA 436. Staghorn coral, Acropora sp.
 Material: Four specimens with large protuberances
 Diagnosis: Reaction to trematode parasite suspected
 Submitter: P. Glynn
- RTLA 437. Leech, Placobdella parasitica
 Material: Four slides
 Diagnosis: Non-neoplastic papillary lesion representing injury and repair; pigment cells represent histiocytes transporting something -- presumably waste.
 Submitter: G. E. Cosgrove
- RTLA 438. Larva of Douglas-fir tussock moth, Hemerocampa pseudotsugata
 Material: Gross specimen with supernumerary leg
 Diagnosis: Developmental anomaly
 Submitter: M. E. Martignoni
- RTLA 439. Corn snake, Elaphe guttata guttata
 Material: One paraffin block
 Diagnosis: Multiple granulomas in response to fungal infection
 Submitter: E. Elkan
- RTLA 440. Coho salmon, Oncorhynchus kisutch
 Material: Tissue from large caudal tumors
 Diagnosis: Fibroma or fibrolipoma
 Submitter: G. R. Bell
- RTLA 441. Tiger python, Python molurus
 Material: One paraffin block
 Diagnosis: Adenoameloblastoma
 Submitter: H. Trebbin
 Reprint: Kast, A. Malignes Adenoameloblastom des Gaumens bei einer Tigerpython. Frankfurt. Z. Pathol., 77: 135-140. 1967.
- RTLA 442. Starfish, Linckia multifora
 Material: Two gross specimens with protuberance on rays
 Diagnosis: Parasitized by gastropod mollusk
 Submitter: A. C. Smith
- RTLA 443. A. Homo sapiens and B. Drosophila melanogaster
 Material: Thirty-one paraffin blocks; 20 photographs; 3 lantern slides; 7 microscope slides (Dr. Mary B. Stark's material)
 Diagnosis: (1) human gastric carcinoma; (2) lethal-7 Drosophila imaginal disk tumor; and (3) melanotic tumors of Drosophila
 Submitter: L. Stark, J. Dahl, and D. Stark
 Reprint: Stark, Mary B. The Origin of Certain Hereditary Tumors in Drosophila. Am. J. Cancer, 31(2): 253-267. 1937.

- RTLA 444. Bluefish, Pomatomus saltatrix
Material: Four slides
Diagnosis: Lymphangioendothelioma
Submitter: G. Gardner and M. M. Barry
- RTLA 445. Longhorn sculpin, Myoxocephalus octodecemspinosus
Material: One slide
Diagnosis: Testis maturation arrest
Submitter: G. Gardner and M. M. Barry
- RTLA 446. Longhorn sculpin, Myoxocephalus octodecemspinosus
Material: Four slides
Diagnosis: Teratocarcinoma-cystadenoma in the kidney
Submitter: G. Gardner and M. M. Barry
- RTLA 447. Earthworm
Material: One slide
Diagnosis: Parasitic lesion; sporozoan suspected
Submitter: D. R. Helland
- RTLA 448. Red-spotted newt, Notophthalmus viridescens
Material: Four slides
Diagnosis: Multiple granulomas in head due to ova or haplomycosis
Submitter: G. E. Cosgrove
- RTLA 449. Gar, Lepisosteus sp.
Material: Five slides
Diagnosis: Oil granuloma
Submitter: B. M. Levy
- RTLA 450. Coho salmon, Oncorhynchus kisutch
Material: Seven tissue samples including gills and viscera
Diagnosis: Thyroid hyperplasia
Submitter: D. R. Wolfert
- RTLA 451. Coho salmon, Oncorhynchus kisutch
Material: Seven tissue samples including gills and viscera
Diagnosis: Thyroid hyperplasia
Submitter: D. R. Wolfert
- RTLA 452. Coho salmon, Oncorhynchus kisutch
Material: Seven tissue samples including gills and viscera
Diagnosis: Thyroid hyperplasia
Submitter: D. R. Wolfert
- RTLA 453. Coho salmon, Oncorhynchus kisutch
Material: Seven tissue samples including gills and viscera
Diagnosis: Thyroid hyperplasia
Submitter: D. R. Wolfert
- RTLA 454. Coho salmon, Oncorhynchus kisutch
Material: Seven tissue samples including gills and viscera
Diagnosis: Thyroid hyperplasia
Submitter: D. R. Wolfert

- RTLA 455A. & B. Boa constrictor, Boa constrictor
 Material: One growth removed from side
 Diagnosis: Granuloma containing a mixed bacterial population
 Submitter: I. Gorman
- RTLA 456. Leopard frog, Rana pipiens
 Material: Fifty-nine black and white photomicrographs
 demonstrating various aspects of renal adenocarcinoma
 Submitter: W. R. Duryee
 Reprints: Duryee, William R. Factors Influencing Development
 of Tumors in Frogs. Ann. N. Y. Acad. Sci., 126(1):
 59-84. 1965.

 Duryee, William R. Dependence of Tumor Formation in
 Frogs on Abnormal Nucleolar Function. In: Biology of
 Amphibian Tumors, Merle Mizell (ed.), pp. 82-100.
 Springer-Verlag: New York/Heidelberg/Berlin. 1969.
- RTLA 457. Atlantic eel, Anguilla vulgaris
 Material: One eel head with oral cauliflower-like growth
 Diagnosis: Epithelial papilloma
 Submitter: B. F. Deys
 Reprint: Deys, B. F. Papillomas in the Atlantic eel, Anguilla
 vulgaris. Natl. Cancer Inst. Monogr. 31: 187-194. 1969.
- RTLA 458. Atlantic eel, Anguilla vulgaris
 Material: One eel head with oral cauliflower-like growth
 Diagnosis: Epithelial papilloma
 Submitter: B. F. Deys
 Reprint: [see RTLA 457]
- RTLA 459. Atlantic eel, Anguilla vulgaris
 Material: One eel head with oral cauliflower-like growth
 Diagnosis: Epithelial papilloma
 Submitter: B. F. Deys
 Reprint: [see RTLA 457]
- RTLA 460. Iguana iguana
 Material: Four slides; two black and white photographs
 Diagnosis: Mucin producing adenocarcinoma arising in a teratoma
 Submitter: P. Zwart
- RTLA 461. Malayan monitor, Varanus salvator
 Material: Eleven slides; six black and white photographs
 Diagnosis: Lymphosarcoma
 Submitter: P. Zwart
 Reprint: Zwart, P. and J. C. Harshbarger. Hematopoietic Neoplasms
 in Lizards: Report of a Typical Case in Hydrosaurus
 amboinensis and of a Probable Case in Varanus salvator.
 Int. J. Cancer, 9: 548-553. 1972.
- RTLA 462. Two-flapped chameleon, Chamaeleo dilepis
 Material: Eight slides
 Diagnosis: Hyperplastic liver nodules versus well-differentiated
 hepatomas
 Submitter: P. Zwart

- RTLA 463. Paddlefish, Polyodon spathula
Material: One piece of body wall with liver protruding; one slide
Diagnosis: Fatty liver
Submitter: C. E. Smith
- RTLA 464. Rainbow trout, Salmo gairdneri
Material: Four pieces of tissue (eyes)
Diagnosis: Cataract
Submitter: C. E. Smith
- RTLA 465. Corn snake, Elaphe guttata guttata
Material: Six slides
Diagnosis: Chondrosarcoma
Submitter: D. Small
- RTLA 466. Guppy, Poecilia reticulata
Material: Two slides
Diagnosis: Granuloma
Submitter: D. Small
- RTLA 467. Bluegill, Lepomis macrochirus
Material: One gross specimen
Diagnosis: Fungus growing on back of fish and invading dorsal muscle and spinal canal
Submitter: G. G. Combs
- RTLA 468. Yellow bullhead, Ictalurus natalis
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 469. Yellow bullhead, Ictalurus natalis
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 470. Yellow bullhead, Ictalurus natalis
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 471. Yellow bullhead, Ictalurus natalis
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 472. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs
- RTLA 473. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. G. Combs

- RTLA 474. Brown bullhead, Ictalurus nebulosus
 Material: One gross specimen
 Diagnosis: Epidermal papilloma
 Submitter: G. G. Combs
- RTLA 475. Brown bullhead, Ictalurus nebulosus
 Material: One gross specimen
 Diagnosis: Epidermal papilloma
 Submitter: G. G. Combs
- RTLA 476. "Robalo" - Patagonian shorefish, Eleginops maclovinus
 Material: One half of a growth on side of body wall
 Diagnosis: Inflammatory lesion, possibly caused by unidentified yeast-like bodies around the periphery of the growth
 Submitter: A. E. Gosztanyi
- RTLA 477. & 477A. Planarian, Planaria dactyligera musculosa
 Material: (477) One gross specimen with finger-shaped outgrowths extending from the dorsal and lateral sides at about the middle of the body; (477A) One gross specimen with protrusion in middle of body on dorsal side
 Diagnosis: Anomalous regeneration; etiology unknown
 Submitter: R. Kenk
- RTLA 478. California king snake, Lampropeltis getulus
 Material: Wet tissue; two color transparencies
 Diagnosis: Undifferentiated sarcoma
 Submitter: R. E. Reed and G. Migaki
- RTLA 479. Yellowfin goby, Acanthogobius flavimanus
 Material: One microscope slide; three black and white photographs
 Diagnosis: Epidermal papilloma
 Submitter: S. Chun
- RTLA 480. Yellowfin goby, Acanthogobius flavimanus
 Material: One microscope slide; three black and white photographs
 Diagnosis: Epidermal papilloma
 Submitter: S. Chun
- RTLA 481. Doderleinia berycoides
 Material: One microscope slide; three black and white photographs
 Diagnosis: Lymphocystis
 Submitter: S. Chun
- RTLA 482. Emerald lizard, Lacerta viridis
 Material: Two microscope slides; one black and white photograph
 Diagnosis: Epidermal papilloma
 Submitter: J. Kridler
- RTLA 483. Hermit crab, Coenobita clypeatus
 Material: One gross specimen with an anterior lateral protrusion on the abdomen
 Diagnosis: Granulomatous reaction to a branching septate fungus
 Submitter: F. A. Chace, Jr.
 Reprint: Chace, Fenner A. Jr. Longevity of the West Indian Terrestrial Hermit Crab, Coenobita clypeatus (Herbst, 1791) (Decapoda, Anomura). Crustaceana, Vol. 22, Part 3. 1972.

RTLA 484. Nosema juli n. sp.

Material: Four microscope slides -- paratypes

Diagnosis: A microsporidian parasite in the millipede Diploiuulus londonensis caeruleocinctus. [See Can. J. Zool., 49(9): 1279-1282, 1971]. Slides are stored in the Protozoa Collection, Division of Echinoderms and Lower Invertebrates, U.S. National Museum of Natural History, Smithsonian Institution, Washington, D.C., 20560, under the following numbers: USNM 24279-USNM 24282.

Submitter: G. G. Wilson

RTLA 485. Gray snapper, Lutjanus griseus

Material: Body wall tissue with large growth

Diagnosis: Neurofibroma

Submitter: A. G. Armitt

RTLA 486. Timber rattlesnake, Crotalus horridus horridus

Material: One paraffin block and tissue fragments

Diagnosis: Fibrosarcoma

Submitter: H. C. Orr

RTLA 487. Leopard frog, Rana pipiens

Material: One microscope slide of kidney adenocarcinoma from the Dr. Balduin Lucké collection

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 488. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Renal adenocarcinoma -- spontaneous tumor -- extremely numerous "transforming" tubules

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 489. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Lung and kidney adenocarcinoma

Submitter: W. R. Duryee

RTLA 490. Leopard frog, Rana pipiens

Material: One microscope slide of a tissue culture

Diagnosis: Renal adenocarcinoma -- large nucleolar extrusion

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 491A. Leopard frog, Rana pipiens

Material: Two microscope slides

Diagnosis: Renal adenocarcinoma -- spontaneous tumor -- "very high malignancy"

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 491B. Leopard frog, Rana pipiens

Material: One microscope slide

Diagnosis: Papilloma on foreleg

Submitter: W. R. Duryee

- RTLA 492. Leopard frog, Rana pipiens
 Material: One microscope slide
 Diagnosis: Renal adenocarcinoma
 Submitter: W. R. Duryee
 Reprint: [see RTLA 456]
- RTLA 493. Black mollie, Poecilia sp.
 Material: One gross specimen
 Diagnosis: Multiple granulomas; bacteria suspected
 Submitter: C. W. Shockley
- RTLA 494. Pacific electric ray, Torpedo californica
 Material: One microscope slide
 Diagnosis: Liver lesions produced by hydatid-like cysts
 Submitter: A. C. Smith
 Reprints: Smith, A. C. and H. F. Little. Liver Lesions Produced by Hydatid-Like Cysts in an Elasmobranch, the Electric Ray (Torpedo californica). Mar. Biol. (Berlin), 3(2): 136-142. 1969.

 Smith, Albert C. and H. F. Little. Liver Lesions Produced by Hydatid-Like Cysts in an Elasmobranch, the Electric Ray, Torpedo californica. Natl. Cancer Inst. Monogr. 31: 251-254. 1969.
- RTLA 495. White croaker, Genyonemus lineatus
 Material: One gross specimen with growth centrally located on head just above the mouth
 Diagnosis: Papilloma; granulomas in heart muscle
 Submitter: K. P. Lindstrom
- RTLA 496. Dover sole, Microstomus pacificus
 Material: One gross specimen with "warty" lesions along the lateral line
 Diagnosis: Ulcerated granulation tissue -- perhaps representing a sloughing healing stage of an epidermal papilloma
 Submitter: K. P. Lindstrom
- RTLA 497. Dover sole, Microstomus pacificus
 Material: One gross specimen with several "whitish" growths about the eyes
 Diagnosis: Angioepithelial nodules and epidermal papilloma
 Submitter: K. P. Lindstrom
- RTLA 498. Boa constrictor, Boa constrictor
 Material: One microscope slide
 Diagnosis: Epidermal papilloma
 Submitter: R. B. Northway
- RTLA 499. Carp, Cyprinus carpio
 Material: Two pieces of tissue
 Diagnosis: Neurilemmoma
 Submitter: G. E. Cosgrove

- RTLA 500. Florida pompano, Trachinotus carolinus
 Material: Two microscope slides
 Diagnosis: Thyroid hyperplasia versus low-grade follicular carcinoma
 Submitter: R. E. Putz
- RTLA 501. Red-spotted newt, Notophthalmus viridescens
 Material: Four microscope slides
 Diagnosis: Fungi (haplomycesis) versus parasite ova
 Submitter: G. E. Cosgrove
- RTLA 502. American oyster, Crassostrea virginica
 Material: Ten microscope slides
 Diagnosis: Diffuse sarcomoid neoplasm
 Submitter: M. Newman
 Reprint: Newman, Martin W. An Oyster Neoplasm of Apparent Mesenchymal Origin. J. Natl. Cancer Inst., 48: 237-243. 1972.
- RTLA 503. Australian skink, Egernia napoleonis
 Material: One piece of liver tissue
 Diagnosis: Mycobacterial granuloma
 Submitter: E. Elkan
- RTLA 504. Starry flounder, Platichthys stellatus
 Material: One gross specimen with extremely numerous growths mostly on fins and pigmented side
 Diagnosis: Granuloma in response to parasite ova plus epidermal hyperplasia
 Submitter: B. F. Deys
- RTLA 505. Starry flounder, Platichthys stellatus
 Material: One gross specimen with growths on fins and top and bottom of head
 Diagnosis: Granuloma in response to parasite ova with epidermal hyperplasia
 Submitter: B. F. Deys
- RTLA 506. Mexican axolotl, Ambystoma mexicanum
 Material: Forty-six microscope slides
 Diagnosis: Lymphoma
 Submitter: L. E. DeLanney
 Reprint: DeLanney, L. E. Lymphosarcoma in the Mexican Axolotl, Ambystoma mexicanum. in: Comparative Leukemia Research 1969. Bibl. haemat., No. 36, R. M. Dutcher (ed.), p. 642 (Karger, Basel/München/Paris/New York 1970).
- RTLA 507. Everglade snake, Elaphe obsoleta rossalenii
 Material: Two pieces of tissue; two microscope slides
 Diagnosis: Malignant melanoma
 Submitter: E. Elkan
- RTLA 508. River jack or Rhinoceros viper, Bitis nasicornis
 Material: Three microscope slides
 Diagnosis: Granulocytic leukemia versus granulocytic leukemoid reaction
 Submitter: R. L. Snyder

- RTLA 518. Brown trout, Salmo trutta
 Material: One microscope slide; one color transparency
 Diagnosis: Fibroma
 Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
- RTLA 519. Haddock, Melanogrammus aeglefinus
 Material: Two microscope slides; one color transparency
 Diagnosis: Fibroma
 Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
 Reprint: [see RTLA 515]
- RTLA 520. Sea morid
 Material: Two microscope slides
 Diagnosis: Parasitic (?) cyst
 Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
 Reprint: [see RTLA 515]
- RTLA 521. Whiting, Merlangius merlangus
 Material: Two microscope slides
 Diagnosis: Fibroma
 Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
 Reprint: [see RTLA 515]
- RTLA 522. Plaice, Pleuronectes platessa
 Material: Two color transparencies
 Diagnosis: Pigmented parasitic cyst
 Submitter: L. E. Mawdesley-Thomas (via D. Bucke)
- RTLA 523. Sandbar shark, Carcharhinus milberti
 Material: Four microscope slides
 Diagnosis: Reticulum cell sarcoma, spleen (only known example of a lymphoreticular or hematopoietic neoplasm in Chondrichthyes)
 Submitter: R. O'Gara and V. T. Oliverio
- RTLA 524. Sandbar shark, Carcharhinus milberti
 Material: Fifteen microscope slides
 Diagnosis: Granulomatous reaction to infection by acid-fast organism [Mycobacterium (?), Nocardia (?)]
 Submitter: R. O'Gara and V. T. Oliverio
- RTLA 525. Walleye, Stizostedion vitreum vitreum
 Material: Two pieces of tissue; two microscope slides
 Diagnosis: Granulomas in response to fungi
 Submitter: C. E. Smith
- RTLA 526. Chinook salmon, Oncorhynchus tshawytscha
 Material: Kidney
 Diagnosis: Well-differentiated nephroblastoma with lithiasis
 Submitter: J. G. Hnath
- RTLA 527. Rainbow trout, Salmo gairdneri
 Material: Liver
 Diagnosis: Hepatoma
 Submitter: J. G. Hnath

- RTLA 528. Plaice, Pleuronectes platessa
 Material: One paraffin block
 Diagnosis: Inflammation
 Submitter: R. Roberts
- RTLA 529. Plaice, Pleuronectes platessa
 Material: One paraffin block
 Diagnosis: Inflammation
 Submitter: R. Roberts
- RTLA 530. Coho salmon, Oncorhynchus kisutch
 Material: Large tumor; one color photograph
 Diagnosis: Fibroma
 Submitter: G. R. Bell
- RTLA 531. Tilehorned prionus -- larvae, Prionus imbricornis
 Material: Twenty-nine microscope slides
 Diagnosis: Multiple granulomas in hemocoel
 Submitter: G. E. Cosgrove
- RTLA 532. Elephant trunk snake, Acrochordus javanicus
 Material: Two microscope slides; one photograph
 Diagnosis: Ovarian fibroma
 Submitter: P. Zwart
- RTLA 533. Coho salmon, Oncorhynchus kisutch
 Material: One gross specimen
 Diagnosis: Osteoma
 Submitter: J. G. Hnath
- RTLA 534. Red-spotted newt, Notophthalmus viridescens
 Material: Three microscope slides
 Diagnosis: Adiaspiromycosis
 Submitter: G. E. Cosgrove
- RTLA 535. Enchytraeus sp.
 Material: Gross specimens from colony with reduced reproduction
 Diagnosis: Parasitized by nematodes
 Submitter: G. E. Cosgrove
- RTLA 536. Sheepshead minnow, Cyprinodon variegatus
 Material: One gross specimen with seven large surface protrusions
 Diagnosis: Parasitic lesions in response to Myxosporidia
 Submitter: B. B. Collette and M. Wiley
- RTLA 537. Freshwater bivalve, Dreissena polymorpha
 Material: Six microscope slides
 Diagnosis: Granuloma
 Submitter: B. S. Morton
- RTLA 538. Black-lip pearl oyster, Pinctada margaritifera
 Material: Two photographs; eight microscope slides
 Diagnosis: Benign fibrovascular polyp
 Submitter: T. G. Dix
 Reprint: Dix, Trevor G. Two Mesenchymal Tumors in a Pearl Oyster, Pinctada margaritifera, J. Invertebr. Pathol., 20(3): 317-320. 1972.

- RTLA 539. Firebellied newt, Cynops pyrrhogaster
 Material: One gross specimen
 Diagnosis: Epidermal papilloma
 Submitter: W. R. Duryee
- RTLA 540. Firebellied newt, Cynops pyrrhogaster
 Material: One gross specimen
 Diagnosis: Papilloma
 Submitter: W. R. Duryee
- RTLA 541. Chlamys (Lyropecten) madisonius (fossil specimen)
 Material: Gross specimen -- left valve only -- formation anterior to the muscle scar
 Diagnosis: Blister between two layers of foliated calcite with a hole, presumably drilled by a parasite, to the surface
 Submitter: M. O'Keefe
- RTLA 542. Panope americana (fossil specimen)
 Material: Gross specimen -- left valve only -- formation underneath the umbo
 Diagnosis: Reactive deposition of presumptive conchiolin
 Submitter: M. O'Keefe
- RTLA 543. Panope americana (fossil specimen)
 Material: Gross specimen -- right valve only -- formation anterior and below the pallial sinus
 Diagnosis: Reactive deposition of presumptive conchiolin
 Submitter: M. O'Keefe
- RTLA 544. Panope americana (fossil specimen)
 Material: Gross specimen -- left valve only -- formation just posterior to the anterior muscle scar
 Diagnosis: Reactive deposition of presumptive conchiolin
 Submitter: M. O'Keefe
- RTLA 545. Panope americana (fossil specimen)
 Material: Gross specimen -- left valve only -- formation centrally located just beneath the pallial line
 Diagnosis: Reactive deposition of presumptive conchiolin
 Submitter: M. O'Keefe
- RTLA 546. Largetooth sawfish, Pristis perotteti
 Material: Two microscope slides
 Diagnosis: Wound repair
 Submitter: T. B. Thorson
- RTLA 547. Bull shark, Carcharhinus leucas
 Material: Two microscope slides
 Diagnosis: Wound repair
 Submitter: T. B. Thorson
- RTLA 548. South American gartersnake, Liophis sp.
 Material: One piece of tissue; one color transparency
 Diagnosis: Muscle degeneration due to mechanical injury
 Submitter: J. A. Peters

- RTLA 549. White croaker, Genyonemus lineatus
Material: Four microscope slides; two black and white photographs
Diagnosis: Epidermal papilloma
Submitter: A. Lawson Bane, A. Thompson, K. P. Lindstrom, Dr. Pflaum
- RTLA 550. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 551. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 552. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 553. Cunner, Tautogolabrus adspersus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: G. W. Bane and S. Shumway
- RTLA 554. Dwarf gourami, Colias lalia
Material: One gross specimen; three black and white photographs;
two color transparencies
Diagnosis: Granuloma
Submitter: C. A. Green and C. J. Dawe
- RTLA 555. Fish
Material: Three gross specimens
Diagnosis: Death by asphyxiation
Submitter: G. C. Williams
- RTLA 556. Cobra, Naja naja
Material: One piece of pancreatic tissue and a growth found in
the peritoneal membrane
Diagnosis: Granuloma
Submitter: V. Lance
- RTLA 557. Cobra, Naja naja
Material: One piece of liver tissue
Diagnosis: Granuloma
Submitter: V. Lance
- RTLA 558. Cobra, Naja naja
Material: Two pieces of liver tissue
Diagnosis: Granuloma
Submitter: V. Lance
- RTLA 559. Cobra, Naja naja
Material: Gall bladder
Diagnosis: Granuloma
Submitter: V. Lane

- RTLA 560. Cobra, Naja naja
 Material: One piece of liver tissue and one piece of rectal tissue
 Diagnosis: Leiomyosarcoma
 Submitter: V. Lance
- RTLA 561. Cobra, Naja naja
 Material: Two paraffin blocks of liver tissue
 Diagnosis: Granuloma
 Submitter: V. Lance
- RTLA 562. Crayfish, Procambarus clarkii
 Material: Twenty-six vials of gross specimens; 300-400 microscope slides; 100-200 photographs
 Diagnosis: Tubular cell hyperplasia in the hepatopancreas and degeneration of the antennal glands due to the effects of N-nitrosodimethylamine
 Submitter: J. C. Harshbarger, G. E. Cantwell, and M. F. Stanton
 Reprint: Harshbarger, J. C., G. E. Cantwell, and M. F. Stanton. Effects of N-nitrosodimethylamine on the Crayfish, Procambarus clarkii. In: Proceedings [of the] IV International Colloquium on Insect Pathology [and] The Society for Invertebrate Pathology, College Park, Maryland, 25-28 August 1970, pp. 425-430. 1970.
- RTLA 563. Pecan weevil, Curculio caryae
 Material: Four gross specimens (grubs)
 Diagnosis: Infected with Metarrhizium fungus
 Submitter: G. E. Cosgrove and W. L. Tedders
- RTLA 564. Pecan weevil, Curculio caryae
 Material: Five gross specimens (grubs)
 Diagnosis: Infected with Beauveria fungus
 Submitter: G. E. Cosgrove and W. L. Tedders
- RTLA 565. Eel, Ilyophis brunneus
 Material: One gross specimen with enlargement on cranium
 Diagnosis: Normal muscle
 Submitter: R. H. Kanazawa
- RTLA 566. Rainbow trout, Salmo gairdneri
 Material: Five microscope slides
 Diagnosis: General toxicosis and a small hepatoma in the liver
 Submitter: C. E. Smith
- RTLA 567. Rainbow trout, Salmo gairdneri
 Material: Four microscope slides
 Diagnosis: General toxicosis
 Submitter: C. E. Smith
- RTLA 568. Rainbow trout, Salmo gairdneri
 Material: Three microscope slides
 Diagnosis: General toxicosis
 Submitter: C. E. Smith

- RTLA 569. Scallop, Aequipecten irradians
 Material: Adductor muscles
 Diagnosis: Granuloma in response to gram-positive bacteria
 Submitter: E. J. Petrovits
- RTLA 570. Oncorhynchus rhodurus f. macrostomus
 Material: Six microscope slides
 Diagnosis: Liver -- hepatoma; stomach -- adenomatous polyps of gastric mucosa
 Submitter: I. Kimura
- RTLA 571. Oncorhynchus rhodurus f. macrostomus
 Material: Six microscope slides
 Diagnosis: Liver -- hepatoma; stomach -- adenomatous polyps of gastric mucosa
 Submitter: I. Kimura
- RTLA 572. Oncorhynchus masou ishikawae
 Material: One microscope slides; one piece of tissue
 Diagnosis: Multiple well-differentiated hepatomas
 Submitter: F. Takashima
 Reprint: Takashima, Fumio and Takashi Hibiya. Hepatic Tumors in Yamame, Oncorhynchus masou ishikawae: A Preliminary Report. Bull. Jap. Soc. Sci. Fish., 38(9): 955-964. 1972.
- RTLA 573. Salvelinus miyabei x S. fontinalis
 Material: Two microscope slides; one piece of tissue
 Diagnosis: Subcutaneous fibrosarcoma; metastatic fibrosarcoma of kidney
 Submitter: F. Takashima
 Reprint: Takashima, Fumio and Takashi Hibiya. Fibrosarcoma in Pond-Cultured Hybrids of Salvelinus. Jap. J. Ichthyol., 19(2): 97-102. 1972.
- RTLA 574. Coho salmon, Oncorhynchus kisutch
 Material: Two pieces of wet thyroid tissue
 Diagnosis: Normal
 Submitter: L. M. Ashley
- RTLA 575. Channel catfish, Ictalurus punctatus
 Material: Two microscope slides
 Diagnosis: Viral inclusions
 Submitter: C. E. Smith
- RTLA 576A., B., C. Fungus, Emmonsia crescens
 Material: Liver tissue from a monkey, pack rat, and guinea pig
 Diagnosis: Experimental infection
 Submitter: W. L. Jellison
- RTLA 577. Leopard frog, Rana pipiens; Red-spotted newt, Cynops pyrrhogaster; Marbled salamander, Ambystoma opacum larvae
 Material: Collection contains meticulously kept data books, hundreds of reprints, photographs, and paraffin blocks and approximately 12,000 microscope slides of naturally occurring,

experimentally induced and tissue culture material from the Lucké renal adenocarcinoma of Rana pipiens including some of Dr. Lucké's original slides. The collection also contains several hundred slides of tumors (principally papillomas) of the red-spotted newt, Cynops pyrrhogaster and microscope slides from Ambystoma opacum larvae used in experimental studies.

Submitter: W. R. Duryee

Reprint: [see RTLA 456]

RTLA 578. Planarian, Dugesia dorotocephala

Material: Six pieces of tissue; five black and white photographs; one film strip

Diagnosis: Anomalous regeneration; etiology unknown

Submitter: R. Kenk

RTLA 579. Earthworm, Lumbricus terrestris

Material: Seven vials of pieces of worm; two color transparencies

Diagnosis: Worms experimentally treated with the pesticide, Carbofuran

Submitter: A. P. Gilman

RTLA 580. Coho salmon, Oncorhynchus kisutch

Material: Four pieces of thyroid tissue

Diagnosis: Normal

Submitter: W. T. Yasutake

RTLA 581. Manure worm, Eisenia foetida

Material: One color transparency

Diagnosis: Worm experimentally treated with the pesticide, Carbofuran

Submitter: A. P. Gilman

RTLA 582. Yellow bullhead, Ictalurus natalis

Material: One gross specimen

Diagnosis: Papilloma

Submitter: G. G. Combs

RTLA 583. Catfish, Ictalurus sp.

Material: One gross specimen

Diagnosis: Papilloma

Submitter: G. G. Combs

RTLA 584. Yellow bullhead, Ictalurus natalis

Material: One gross specimen

Diagnosis: Nevus

Submitter: G. G. Combs

RTLA 585. Bluegill, Lepomis macrochirus

Material: One gross specimen with unusually shallow dorsal muscle and unusually short dorsal fin

Diagnosis: Developmental anomaly

Submitter: D. Gaines

- RTLA 586. Bluegill, Lepomis macrochirus
 Material: One gross specimen
 Diagnosis: Granulomas associated with defect in skeletal muscle adjacent to anal fin
 Submitter: D. Gaines
- RTLA 587. Dinosaur, Allosaurus fragilis
 Material: Petrified bones
 Diagnosis: Various examples of callus formation, osteomyelitis and perhaps ankylosis
 Submitter: J. H. Madsen, Jr. and M. A. Carey
- RTLA 588. Boa constrictor, Boa constrictor
 Material: One piece of tissue
 Diagnosis: Fibroma versus fibrocarcinoma
 Submitter: B. L. Burge
- RTLA 589. Atlantic salmon, Salmo salar
 Material: Five microscope slides
 Diagnosis: Epidermal carcinoma
 Submitter: R. J. Roberts
- RTLA 590. Rainbow trout, Salmo gairdneri
 Material: Three microscope slides
 Diagnosis: Unusual cells in the liver and the spleen believed to be a protozoan parasite. (Reminiscent of Leishmania).
 Submitter: R. J. Roberts
- RTLA 591. Alpine newt, Triturus alpestris
 Material: One microscope slide
 Diagnosis: Neuroepithelioma
 Submitter: J. Darquenne
 Reprint: Darquenne, Jacques. Actions de substances cancérigènes sur le régénérat de la queue de Triturus alpestris Laur. (Amphibiens, Salamandridés). C. R. Hebd. Seances Acad. Sci., Ser. D, Sci. Nat. (Paris), 273(16): 1460-1462. 1971.
- RTLA 592. Rainbow trout, Salmo gairdneri
 Material: One microscope slide
 Diagnosis: Hepatoma
 Submitter: C. E. Smith
- RTLA 593. Shortnose batfish, Ogcocephalus nasutus
 Material: One microscope slide
 Diagnosis: Lymphocystis -- the growth was 2-3 c. in diameter and was located on the caudal peduncle of the specimen
 Submitter: C. E. Smith
- RTLA 594. Cichlasoma festivum
 Material: Three pieces of stomach tissue; one microscope slide
 Diagnosis: Gastric leiomyoma
 Submitter: R. Bootsma

- RTLA 595A. & B. Coho salmon, Oncorhynchus kisutch
 Material: 595A -- five emaciated, lethargic fingerlings
 595B -- five normal fingerlings
 Diagnosis: No histologic lesions
 Submitter: J. G. Hnath
- RTLA 596. Striped mojarra, Diapterus plumieri
 Material: One gross tumor specimen; six microscope slides
 Diagnosis: Lipoma -- this striped mojarra is reported as the
 thirteenth fish known with a lipoma
 Submitter: F. J. Schwartz
 Reprint: Schwartz, F. J. and René Márquez. A Lipoma in the
 Striped Mojarra, Diapterus plumieri (Pisces: Gerridae)
 from Mexico. J. Elisha Mitchell Sci. Soc., 87(3): 87-90.
 1971.
- RTLA 597. Bullhead, Ictalurus sp.
 Material: One gross specimen
 Diagnosis: Malignant melanoma
 Submitter: E. L. King, Jr.
- RTLA 598. Tilehorned prionus, Prionus imbricornis
 Material: Four pieces of larvae
 Diagnosis: Extensive fungal invasion
 Submitter: G. E. Cosgrove and J. A. Payne
- RTLA 599. Staghorn coral, Acropora formosa
 Material: Three microscope slides
 Diagnosis: Polyp; possibly in response to trematode parasite
 Submitter: D. P. Cheney
 Reprints: Wong, Alan and Thomas C. Cheng. Histochemical and
 Histopathological Studies on Corals, Porites spp.,
 Parasitized by Trematode Metacercariae. Soc. Invertebr.
 Pathol. Newsletter, 2(2): 23-24. 1969.
- Cheney, D. P., A. J. Loerzel, R. H. Randall, and M. R.
 Struck. A Coralline Tumor of Acropora formosa from Guam.
 Soc. Invertebr. Pathol. Newsletter, 2(6): 13. 1970.
- Cheney, Daniel P. Coral Tumors. Guam Sci. Teachers
 Assoc. Newsletter, Vol. 6, No. 7. 6 March 1972.
- RTLA 600. White perch, Morone americana
 Material: One gross specimen with a large, soft, spongy swelling
 on the ventral side posterior to the gills and extending
 to the anal fin
 Diagnosis: Biliary duct cyst
 Submitter: D. Ritchie and B. B. Collette
- RTLA 601. White perch, Morone americana
 Material: One gross specimen with excessive mucus secretion
 Diagnosis: Pending
 Submitter: D. Ritchie and B. B. Collette

- RTLA 602. Australian rock oyster, Crassostrea commercialis
 Material: Four microscope slides
 Diagnosis: Polypoid pericardial tumor of Leydig cell origin
 Submitter: P. Dinamani
 Reprint: Dinamani, P. and Peter H. Wolf. Multiple Tumors in the Pericardial Cavity of an Australian Rock Oyster, Crassostrea commercialis (Iredale and Roughley). Int. J. Cancer, 11: 293-299, 1973.
- RTLA 603. Longnose gar, Lepisosteus osseus
 Material: Eight microscope slides; one photograph
 Diagnosis: Benign epithelioma on the pelvic fin
 Submitter: J. D. Hendricks
- RTLA 604. Staghorn coral, Acropora formosa
 Material: One gross specimen
 Diagnosis: Polyp; possibly in response to trematode parasite
 Submitter: D. P. Cheney
 Reprints: [see RTLA 599]
- RTLA 605. Staghorn coral, Acropora formosa
 Material: One gross specimen
 Diagnosis: Polyp; possibly in response to trematode parasite
 Submitter: D. P. Cheney
 Reprints: [see RTLA 599]
- RTLA 606. Staghorn coral, Acropora formosa
 Material: One gross specimen
 Diagnosis: Polyp; possibly in response to trematode parasite
 Submitter: D. P. Cheney
 Reprints: [see RTLA 599]
- RTLA 607. Guppy, Poecilia reticulata
 Material: One gross specimen
 Diagnosis: Developmental defect composed of striated muscle and bone
 Submitter: J. S. Laurie
- RTLA 608. Weakfish, Cynoscion regalis
 Material: Eight microscope slides; two photographs
 Diagnosis: Early well-differentiated lipoma versus developmental anomaly
 Submitter: J. D. Hendricks
 Reprints: Tubiash, Haskell S. and Jerry D. Hendricks. A Possible Lipoma in the Weakfish, Cynoscion regalis (Bloch and Schneider). [in preparation].
- RTLA 609. Hogchoker, Trinectes maculatus
 Material: Six microscope slides
 Diagnosis: Well-differentiated lipoma or anomalous deposit
 Submitter: M. W. Newman
- RTLA 610. Croaker
 Material: Three consecutive caudal vertebrae
 Diagnosis: Multiple exostosis of the neural and haemal spines
 Submitter: M. Landolt

- RTLA 611. Croaker
Material: Two consecutive caudal vertebrae
Diagnosis: Multiple exostosis of the neural and haemal spines
Submitter: M. Landolt
- RTLA 612. Walleye, Stizostedion vitreum vitreum
Material: Part of the caudal fin with part of a tumor attached;
four microscope slides; fourteen photographs
Diagnosis: Cutaneous fibroma
Submitter: D. Woronecki
- RTLA 613. White catfish, Ictalurus catus
Material: One piece of tissue; four microscope slides; two
photographs
Diagnosis: Reticulum cell sarcoma
Submitter: M. Landolt
- RTLA 614. African clawed toad, Xenopus laevis
Material: One hind leg
Diagnosis: Chondrification associated with hemorrhage and repair
Submitter: G. E. Cosgrove
- RTLA 615. Earthworm, Lumbricus terrestris
Material: Portions of two worms experimentally treated with 11
ug Carbofuran; one with an enlarged area
Diagnosis: Heavy nematode infection
Submitter: A. P. Gilman
- RTLA 616. Earthworm, Lumbricus terrestris
Material: One whole and two portions of worms experimentally
treated with 5 ug of a Carbofuran metabolite, 3-
hydroxycarbofuran showing blister-like lesions
Diagnosis: Heavy nematode infection
Submitter: A. P. Gilman
- RTLA 617. Earthworm, Lumbricus terrestris
Material: One gross specimen experimentally treated with 57 ug of a
Carbofuran metabolite, 3-hydroxycarbofuranphenol showing
blister-like lesions
Diagnosis: Heavy nematode infection
Submitter: A. P. Gilman
- RTLA 618. Earthworm, Lumbricus terrestris
Material: One gross specimen experimentally treated with ug Bux
(a carbamate insecticide) showing collar-like protrusions
Diagnosis: Heavy nematode infection
Submitter: A. P. Gilman
- RTLA 619. Earthworm, Lumbricus terrestris
Material: Whole and one portion of worm experimentally treated with
17 ug Lannate (a carbamate insecticide) showing numerous
blister-like lesions
Diagnosis: Heavy nematode infection
Submitter: A. P. Gilman

- RTLA 620. Yellow bullhead, Ictalurus natalis
 Material: One gross specimen
 Diagnosis: Melanoma
 Submitter: J. A. Couch
- RTLA 621. Yellow bullhead, Ictalurus natalis
 Material: One gross specimen
 Diagnosis: Melanoma
 Submitter: J. A. Couch
- RTLA 622. Rainbow trout, Salmo gairdneri
 Material: Branchial arch with enlarged thyroid; two microscope slides
 Diagnosis: Follicular adenocarcinoma of the thyroid
 Submitter: E. Mateo and M. Landolt
- RTLA 623A. & B. Northern pike, Esox lucius
 Material: One gross specimen with two ulcerative lesions along the dorsal surface
 Diagnosis: Probable lymphosarcoma -- tissue too autolyzed for confirmation
 Submitter: E. R. Brown
- RTLA 624. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen with multiple nodular growths
 Diagnosis: Lymphocystis
 Submitter: E. R. Brown
- RTLA 625. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen with soft blister-like growths in the webbing of the caudal fin
 Diagnosis: Lymphocystis
 Submitter: E. R. Brown
- RTLA 626. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen with a mid-lateral protrusion on the right side just posterior to the operculum
 Diagnosis: Probable neurilemmoma -- tissue too autolyzed for confirmation
 Submitter: E. R. Brown
- RTLA 627. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen with soft blister-like growths in the webbing of all the fins
 Diagnosis: Lymphocystis
 Submitter: E. R. Brown
- RTLA 628. Ghost shrimp, Callinassa affinis
 Material: Three microscope slides
 Diagnosis: Digestive gland and integument lesions associated with malnutrition
 Submitter: A. C. Smith
 Reprint: Smith, Albert C. and Tonal L. Taylor. Digestive Gland and Integument Lesions Associated with Malnutrition in a Ghost Shrimp, Callinassa affinis. J. Invertebr. Pathol., 12(1): 1-6. 1968.

- RTLA 629. Rainbow trout, Salmo gairdneri
 Material: Most of the upper jaw with part of a growth broadly attached to the outside surface; one photograph
 Diagnosis: Fibroma
 Submitter: P. H. Wolf
- RTLA 630. Rainbow trout, Salmo gairdneri
 Material: Fifteen microscope slides; one photograph
 Diagnosis: Thymic lymphoma -- probably with leukemia
 Submitter: C. E. Smith
- RTLA 631. Australian snake-necked turtle, Chelodina longicollis
 Material: Growth from the dorsal side of the proximal end of the neck
 Diagnosis: Multiple granulomas with a bacterial etiology
 Submitter: W. Frair
- RTLA 632. Nile monitor lizard, Varanus niloticus
 Material: Four microscope slides
 Diagnosis: Pre-neoplastic nodule versus a minimal deviation hepatoma
 Submitter: P. Zwart
- RTLA 633. African sungazer lizard, Cordylus polyzonus
 Material: Two microscope slides
 Diagnosis: Adenoma of the thyroid
 Submitter: P. Zwart
- RTLA 634. Garter snake, Thamnophis sirtalis
 Material: Two microscope slides
 Diagnosis: Cholangioma
 Submitter: P. Zwart
- RTLA 635. Nile monitor lizard, Varanus niloticus
 Material: Seven microscope slides
 Diagnosis: Probable plasma cell tumor
 Submitter: P. Zwart
- RTLA 636. Thorny skate, Raja radiata
 Material: One greatly enlarged testis
 Diagnosis: Adenoma of seminiferous epithelium (tentative)
 Submitter: M. Newman
- RTLA 637. Tiger swallowtail, Papilio glaucus
 Material: One gross specimen with a growth approximately .5 cm. in diameter on the abdomen
 Diagnosis: Salivary reservoir cyst containing bacteria and fungi
 Submitter: K. Wolf
- RTLA 638. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen with multiple raised lesions
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 639. White sucker, Catostomus commersoni
 Material: One gross specimen
 Diagnosis: Tissue unsuitable for diagnosis
 Submitter: E. R. Brown

- RTLA 640. Northern pike, Esox lucius
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 641. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 642. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 643. Walleye, Stizostedion vitreum vitreum
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 644. Northern pike, Esox lucius
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 645. White sucker, Catostomus commersoni
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 646. White sucker, Catostomus commersoni
 Material: One gross specimen
 Diagnosis: Cutaneous papilloma
 Submitter: E. R. Brown
- RTLA 647. Northern pike, Esox lucius
 Material: One fish head
 Diagnosis: Epidermal hyperplasia
 Submitter: E. R. Brown
- RTLA 648. Kahawai, Arripis trutta
 Material: Portion of the right body wall containing one-half of a growth
 Diagnosis: Well-differentiated lipoma
 Submitter: P. M. Hine
- RTLA 649. Sheephead, Archosargus probatocephalus
 Material: A piece of body wall consisting of normal appearing tissue with a growth attached to the outer surface
 Diagnosis: Guanophoroma
 Submitter: W. E. Ribelin
- RTLA 650. Croaker
 Material: One microscope slide
 Diagnosis: Neuroblastoma; retinoneuroblastoma
 Submitter: M. M. Sigel

- RTLA 651. Green turtle, Chelonia mydas
Material: Six microscope slides
Diagnosis: Fibropapilloma
Submitter: R. M. Overstreet
- RTLA 652. Lingcod, Ophiodon elongatus
Material: One piece of tissue
Diagnosis: Lymphocystis
Submitter: G. R. Bell
- RTLA 653. Sockeye salmon, Oncorhynchus nerka
Material: An excised growth
Diagnosis: Papillary adenocarcinoma
Submitter: G. R. Bell
- RTLA 654. Florida softshell (turtle), Trionyx ferox
Material: Three microscope slides
Diagnosis: Granulocytic neoplasm versus a reticulum cell sarcoma
Submitter: P. Zwart
- RTLA 655. Goldfish, Carassius auratus
Material: The right half of the head and a transverse section through the gill chamber
Diagnosis: Fibroma
Submitter: E. C. Bay
- RTLA 656. Leopard frog, Rana pipiens
Material: Two microscope slides
Diagnosis: Epidermal papilloma
Submitter: B. J. Cohen
- RTLA 657. Leopard frog, Rana pipiens
Material: Four microscope slides
Diagnosis: Squamous cell carcinoma
Submitter: B. J. Cohen
- RTLA 658. Leopard frog, Rana pipiens
Material: Four microscope slides
Diagnosis: Squamous cell carcinoma; epidermal hyperplasia
Submitter: B. J. Cohen
- RTLA 659. Leopard frog, Rana pipiens
Material: Two microscope slides
Diagnosis: Dermal gland adenocarcinoma
Submitter: B. J. Cohen
- RTLA 660. Leopard frog, Rana pipiens
Material: Eight microscope slides
Diagnosis: Invasive squamous cell carcinoma
Submitter: B. J. Cohen
- RTLA 661A. & B. Spotted-newt, Notophthalmus viridescens
Material: Six pathologic gross specimens; two normal gross specimens
Diagnosis: Adiaspiromycosis
Submitter: N. Cohen

- RTLA 662. Spotted newt, Notophthalmus viridescens
 Material: A hard lump biopsied from the tail
 Diagnosis: Group of hypertrophic sub-epidermal glands associated with parasitic worms
 Submitter: N. Cohen
- RTLA 663. Death adder, Acanthopis antarticus
 Material: Fifteen microscope slides
 Diagnosis: Reticulum cell sarcoma
 Submitter: L. A. Griner
- RTLA 664. Hognose snake, Heterodon platyrhinos
 Material: Fifteen microscope slides
 Diagnosis: Reticulum cell sarcoma
 Submitter: R. L. Snyder
- RTLA 665. Galaxias vulgaris
 Material: Partially dissected specimen with multiple growths in body wall; two microscope slides
 Diagnosis: Multiple infectious granulomas
 Submitter: P. M. Hine
- RTLA 666. Great sculpin, Myoxocephalus polyacanthocephalus
 Material: Four vials containing normal and pathologic samples of skin from the dorsal region of the head and the dorsolateral region below the second dorsal fin of the same specimen
 Diagnosis: Normal organ
 Submitter: J. S. Laurie
- RTLA 667. Flathead sole, Hippoglossoides elassodon
 Material: Tail of a sole with a rod-shaped growth
 Diagnosis: Epidermal papilloma
 Submitter: J. S. Laurie
- RTLA 668. Tidepool sculpin, Oligocottus maculosus
 Material: Two gross specimens with multiple grape-like clusters of growths on the dorsal region of the head
 Diagnosis: Intradermal cystic lesions consistent with gas bubble disease
 Submitter: J. S. Laurie
- RTLA 669. Lake whitefish, Coregonus clupeaformis
 Material: A piece of tissue from the posterior dorsal body cavity with a finger-like protrusion
 Diagnosis: Septate fungus with encysted spores
 Submitter: C. R. Wilson
- RTLA 670. Burbot, Lota lota
 Material: A piece of body wall
 Diagnosis: Inflammatory lesion in response to unidentified parasite material
 Submitter: G. R. Bell

- RTLA 671. Coho salmon, Oncorhynchus kisutch
Material: Part of the body wall containing a cyst-like growth
Diagnosis: Sarcoma
Submitter: G. R. Bell
- RTLA 672. Luderick, Girella tricuspidata
Material: Two slides
Diagnosis: Toxic necrosis of kidney tubules
Submitter: P. H. Wolf
- RTLA 673. Rainbow trout, Salmo gairdneri
Material: One piece of tissue; two slides; six photographs
Diagnosis: Nephroblastoma
Submitter: P. H. Odense
Reprint: Odense, P. H., V. H. Logan, and S. R. Baker. Spontaneous Nephroblastoma in a Rainbow Trout (Salmo gairdneri). J. Fish. Res. Board Can., 30: 549-551. 1973.
- RTLA 674. Green crab, Carcinus maenus
Material: One gross specimen
Diagnosis: Developmental anomaly containing loose connective tissue
Submitter: G. W. Bane and S. Shumway
- RTLA 675. Cunner, Tautoglabrus adspersus
Material: One gross specimen
Diagnosis: Ameloblastic odontoma
Submitter: G. W. Bane and S. Shumway
- RTLA 676. Goldfish, Carassius auratus
Material: One piece of viscera; 4 slides
Diagnosis: Granuloma
Submitter: P. M. Hine
- RTLA 677. Atlantic menhaden, Brevoortia tyrannus
Material: One piece of tissue
Diagnosis: Ganglioneuroblastoma
Submitter: J. A. Quick, Jr. and W. Kandrashoff
- RTLA 678. Striped mojarra, Diapterus plumieri
Material: One piece of tissue; two photographs
Diagnosis: Fibroma
Submitter: J. A. Quick, Jr. and W. Kandrashoff
- RTLA 679. Largemouth bass, Micropterus salmoides
Material: One piece of tissue
Diagnosis: Lipoma
Submitter: J. L. Gaines, Jr.
- RTLA 680. Bluegill, Lepomis macrochirus
Material: One piece of tissue
Diagnosis: Fibroma
Submitter: J. L. Gaines, Jr.

- RTLA 681. Largemouth bass, Micropterus salmoides
Material: One piece of tissue
Diagnosis: Fibroma
Submitter: J. L. Gaines, Jr.
- RTLA 682. Black bullhead, Ictalurus melas
Material: One gross specimen
Diagnosis: Cutaneous papilloma with extra chromatophores
Submitter: J. L. Gaines, Jr.
- RTLA 683. Black bullhead, Ictalurus melas
Material: One gross specimen
Diagnosis: Cutaneous papilloma with extra chromatophores
Submitter: J. L. Gaines, Jr.
- RTLA 684. Bluegill, Lepomis macrochirus
Material: One gross specimen with multiple chalky skin lesions
Diagnosis: Pending
Submitter: J. L. Gaines, Jr.
- RTLA 685. Largemouth bass, Micropterus salmoides
Material: Anterior part of one gross specimen
Diagnosis: Multiple cutaneous fibromas and fibrosarcomas
Submitter: J. L. Gaines, Jr.
- RTLA 686. Striped bass, Morone saxatilis
Material: Mandible with a growth
Diagnosis: Exostosis; possibly as a result of an old fracture
Submitter: J. L. Gaines, Jr.
- RTLA 687. Brown trout, Salmo trutta
Material: One piece of tissue
Diagnosis: Chronic inflammation and scar formation
Submitter: J. G. Hnath
- RTLA 688. Key brotula, Ogilbia cayorum
Material: One gross specimen
Diagnosis: Protozoan cysts
Submitter: N. Rothman Feinberg
- RTLA 689. Northern pike, Esox lucius
Material: One head
Diagnosis: Fibroma
Submitter: E. R. Brown
- RTLA 690. Walleye, Stizostedion vitreum vitreum
Material: One head
Diagnosis: Probable rhabdomyoma
Submitter: E. R. Brown
- RTLA 691. Bluegill, Lepomis macrochirus
Material: Twelve gross specimens
Diagnosis: Tissue unsuitable for diagnosis
Submitter: E. R. Brown

- RTLA 692. Bullhead, Ictalurus sp.
Material: Nine gross specimens
Diagnosis: Tissue unsuitable for diagnosis
Submitter: E. R. Brown
- RTLA 693. Hornyhead chub, Nocomis biguttatus
Material: One gross specimen
Diagnosis: Hyperpigmentation in epidermis
Submitter: E. R. Brown
- RTLA 694. Northern pike, Esox lucius
Material: One gross specimen
Diagnosis: Probable neoplasm; tissue unsuitable for making a definitive diagnosis
Submitter: E. R. Brown
- RTLA 695. Yellow bullhead, Ictalurus natalis
Material: One gross specimen; two pieces of a lesion removed from the specimen
Diagnosis: Pigmented epidermal papilloma
Submitter: J. C. Harshbarger and J. A. Couch
- RTLA 696. Yellow bullhead, Ictalurus natalis
Material: One gross specimen; two pieces of a lesion removed from the specimen
Diagnosis: Pigmented epidermal papilloma
Submitter: J. C. Harshbarger and J. A. Couch
- RTLA 697. Chinook salmon, Oncorhynchus tshawytscha
Material: One pathologic piece of spleen; one normal piece of spleen
Diagnosis: Hemangioendothelioma
Submitter: G. R. Bell
- RTLA 698. Walleye, Stizostedion vitreum vitreum
Material: Wet tissue
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 699. Walleye, Stizostedion vitreum vitreum
Material: Wet tissue
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 700. Steelhead rainbow trout, Salmo gairdneri
Material: A portion of fish extending from the anterior end of the second dorsal fin to the anal opening
Diagnosis: Cystic well-differentiated nephroblastoma
Submitter: J. G. Hnath
- RTLA 701. Chinook salmon, Oncorhynchus tshawytscha
Material: A growth located ventral to the kidney
Diagnosis: Cystic well-differentiated nephroblastoma
Submitter: J. G. Hnath

- RTLA 702. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one photograph
Diagnosis: Epidermoid cyst containing sloughed cells
Submitter: F. L. Rose
- RTLA 703. Tiger salamander, Ambystoma tigrinum
Material: One microscope slides; one photograph
Diagnosis: Epidermoid cyst containing sloughed cells
Submitter: F. L. Rose
- RTLA 704. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one photograph
Diagnosis: Papilloma -- noninvasive
Submitter: F. L. Rose
- RTLA 705. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one photograph
Diagnosis: Probable fibroma
Submitter: F. L. Rose
- RTLA 706. Tiger salamander, Ambystoma tigrinum
Material: Two microscope slides; one photograph
Diagnosis: Fibroma versus myxofibroma
Submitter: F. L. Rose
- RTLA 707. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one photograph
Diagnosis: Dermal melanoma
Submitter: F. L. Rose
- RTLA 708. Tiger salamander, Ambystoma tigrinum
Material: Two microscope slides; four photographs
Diagnosis: Probable resolving hemorrhage with breakdown and phagocytosis of red blood cells, however, endothelioma cannot be ruled out
Submitter: F. L. Rose
- RTLA 709. Walleye, Stizostedion vitreum vitreum
Material: Three sections of body wall bearing a growth
Diagnosis: Dermal fibroma with mottled foci of calcification
Submitter: J. G. Hnath
- RTLA 710. Summer flounder, Paralichthys dentatus
Material: A section from a growth which was located near the tip of the lower jaw medially
Diagnosis: Probable lipoma; tissue inadequate for definitive diagnosis
Submitter: R. R. Stickney
- RTLA 711. Rainbow trout, Salmo gairdneri
Material: Seven microscope slides
Diagnosis: Thymic hyperplasia including hyperplastic epidermal elements
Submitter: R. J. Roberts

- RTLA 712. Guppy, Poecilia reticulata
 Material: Two partially dissected fish; one microscope slide
 Diagnosis: Massive infestation of surface viscera by Ophryoglena (ciliated protozoan)
 Submitter: G. E. Cosgrove
- RTLA 713. Oyster, Crassostrea virginica
 Material: One gross specimen without shell; 6 black and white photographs; 3 microscope slides
 Diagnosis: Focal hyperplasia of vesicular connective tissue in the mantle
 Submitter: C. J. Dawe
- RTLA 714. Oyster, Crassostrea virginica
 Material: One gross specimen without shell; 5 black and white photographs; 6 microscope slides
 Diagnosis: Aberrant nodule of vesicular connective tissue; possibly a developmental anomaly
 Submitter: C. J. Dawe
- RTLA 715. Peruvian brook trout, (probably Salvelinus fontinalis)
 Material: Stomach and contiguous small bowel -- portions of liver and spleen are attached to the gastric cardia and the small bowel respectively by mesenteries; 13 microscope slides; 4 color transparencies; 6 black and white photographs
 Diagnosis: Adenocarcinoma of the stomach; intussusception of stomach and carcinoma into the small bowel
 Submitter: M. Landolt and E. Mateo
- RTLA 716. Box tortoise, Terrapene carolinensis
 Material: Two microscope slides
 Diagnosis: Kidney adenocarcinoma or adenosarcoma with metastases to the liver
 Submitter: R. Ippen
 Reprint: Ippen, R. Ein Beitrag Zu Den Spontantumoren Bei Reptilien. Verhandlungsbericht des XIV. Internationalen Symposiums Über die Erkrankungen der Zootiere (Wrocław, 1972). pp. 409-418. Akademie-Verlag, Berlin, 1972.
- RTLA 717. Greek land tortoise, Testudo hermanni
 Material: Four microscope slides
 Diagnosis: Lymphoblastic lymphosarcoma
 Submitter: R. Ippen
 Reprint: [see RTLA 716]
- RTLA 718. Ornamental tortoise, Chrysemys picta
 Material: One microscope slide
 Diagnosis: Parathyroid adenoma
 Submitter: R. Ippen
 Reprint: [see RTLA 716]

- RTLA 719. Malayan monitor, Varanus salvator
 Material: Three microscope slides
 Diagnosis: Lymphocytic or plasmacytic lymphoma
 Submitter: R. Ippen
 Reprint: [see RTLA 716]
- RTLA 720. Teju, Tupinambis rufescens
 Material: One microscope slide
 Diagnosis: Heptaoma
 Submitter: R. Ippen
 Reprint: [see RTLA 716]
- RTLA 721. Water moccasin, Agkistrodon piscivorus
 Material: One microscope slide
 Diagnosis: Fibroma molle
 Submitter: R. Ippen
 Reprint: [see RTLA 716]
- RTLA 722. Indian striate adder, Natrix stolata
 Material: One microscope slide
 Diagnosis: Hemangioendothelioma
 Submitter: R. Ippen
 Reprint: [see RTLA 716]
- RTLA 723. Atlantic salmon, Salmo salar
 Material: One gross specimen
 Diagnosis: Marked epithelial hyperplasia characterized by cellular atypia suggestive of carcinoma in situ
 Submitter: M. Landolt and R. Dexter
- RTLA 724. Planarian, Dugesia dorotocephala
 Material: Five gross specimens
 Diagnosis: Anomalous regeneration; etiology unknown
 Submitter: E. J. Bienen
- RTLA 725. Brown shrimp, Penaeus aztecus
 Material: Twenty microscope slides
 Diagnosis: Cutaneous papilloma surrounding loose connective tissue and coagulated protein (hemolymph?)
 Submitter: D. V. Lightner
 Reprint: Sparks, Albert K. and Donald V. Lightner. A Tumorlike Papilliform Growth in the Brown Shrimp (Penaeus aztecus). J. Invertebr. Pathol., 22(2): 203-212. 1973.
- RTLA 726. Cutthroat trout (Lahonton strain), Salmo clarki
 Material: Three microscope slides
 Diagnosis: Advanced hepatoma
 Submitter: C. E. Smith
- RTLA 727. Anolis sp.
 Material: One gross specimen with lesions on tail and left hindleg
 Diagnosis: Bacterial granuloma
 Submitter: H. A. Fehlmann

- RTLA 728A. & B. Japanese beetle, Popillia japonica
Material: Two gross specimens
Diagnosis: Septate fungus
Submitter: D. A. Chittick
- RTLA 729. Rhinoceros viper, Bitis nasicornis
Material: The head and two additional pieces of tissue
Diagnosis: Conjunctival inclusion cysts versus congenital infection
Submitter: J. E. Cooper
- RTLA 730. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Pending
Submitter: E. R. Brown
- RTLA 731. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 732. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis probably associated with dermal sarcoma
Submitter: E. R. Brown
- RTLA 733. Northern pike, Esox lucius
Material: One gross specimen
Diagnosis: Pending
Submitter: E. R. Brown
- RTLA 734. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 735. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 736. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 737. Bass
Material: One gross specimen
Diagnosis: Scoliosis
Submitter: E. R. Brown
- RTLA 738. Northern pike, Esox lucius
Material: One gross specimen
Diagnosis: Probable neoplasm; preservation insufficient for
conclusive determination
Submitter: E. R. Brown

- RTLA 739. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 740. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 741. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Dermal sarcoma
Submitter: E. R. Brown
- RTLA 742. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis associated with dermal sarcoma
Submitter: E. R. Brown
- RTLA 743. Northern pike, Esox lucius
Material: One gross specimen
Diagnosis: Hematopoietic neoplasm
Submitter: E. R. Brown
- RTLA 744. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 745. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Probable dermal sarcoma
Submitter: E. R. Brown
- RTLA 746. Bass
Material: One gross specimen
Diagnosis: Multiple bacterial granulomas
Submitter: E. R. Brown
- RTLA 747. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Lymphocystis
Submitter: E. R. Brown
- RTLA 748. Northern pike, Esox lucius
Material: One piece of body wall
Diagnosis: Nephroblastoma
Submitter: E. R. Brown
- RTLA 749. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen
Diagnosis: Dermal sarcoma
Submitter: E. R. Brown

- RTLA 750. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs
- RTLA 751. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs
- RTLA 752. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs
- RTLA 753. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs
- RTLA 754. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs
- RTLA 755. Bullhead, Ictalurus sp.
Material: One gross specimen
Diagnosis: Papilloma
Submitter: G. G. Combs
- RTLA 756. American toad, Bufo americanus
Material: Four toads with lesions randomly scattered on the ventral surface of each animal
Diagnosis: Probably due to parasites
Submitter: G. Gentry
- RTLA 757. Australian rock oyster, Crassostrea commercialis
Material: One microscope slide
Diagnosis: Haplosporidan and helminth parasites
Submitter: P. H. Wolf
- RTLA 758. Australian rock oyster, Crassostrea commercialis
Material: One microscope slide
Diagnosis: Tylocephalum (?) sp.
Submitter: P. H. Wolf
- RTLA 759A. & B. African walking catfish
Material: Two microscope slides; 2 black and white photographs
Diagnosis: Hemangioma (RTLA 759A); Dermal fibroma (RTLA 759B)
Submitter: I. Paperna
- RTLA 760. Electric catfish, Malapterurus electricus
Material: Two microscope slides; 2 paraffin blocks; one black and white photograph
Diagnosis: Epithelioma -- on lips, head and flanks
Submitter: I. Paperna

- RTLA 761. Cichlid, Haplochromis ismaeli
Material: One microscope slide; 2 black and white photographs
Diagnosis: Lipoma - subcutaneous
Submitter: I. Paperna
- RTLA 762. Mummichog, Fundulus heteroclitus
Material: Two microscope slides; 2 black and white photographs
Diagnosis: fibro-epithelioma of the skin
Submitter: I. Paperna
- RTLA 763. Ulua, Carangoides ajax (white ulua) or C. equula (ulua)
Material: Body serosa with worms
Diagnosis: Pleurocercoid larvae of a tapeworm
Submitter: A. C. Smith
- RTLA 764. Black tip shark, Carcharhinus melanopterus
Material: Normal and mottled liver
Diagnosis: Fatty Liver
Submitter: A. C. Smith and R. L. Taylor
- RTLA 765. Rainbow trout, Salmo gairdneri
Material: One gross specimen; 3 microscope slides
Diagnosis: Nephroblastoma
Submitter: D. Woronecki
- RTLA 766. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Epidermal papilloma
Submitter: J. L. Gaines, Jr.
- RTLA 767. Australian rock oyster, Crassostrea commercialis
Material: One microscope slide
Diagnosis: Hematopoietic neoplasm
Submitter: P. H. Wolf
- RTLA 768. Australian rock oyster, Crassostrea commercialis
Material: Four microscope slides; 2 black and white photographs
Diagnosis: Infected with ciliate protozoans
Submitter: P. H. Wolf
- RTLA 769. Jewfish, Sciaenidae alearctica
Material: Four pieces of wet tissue
Diagnosis: Pending
Submitter: P. H. Wolf
- RTLA 770. White hake, Urophycis tenuis
Material: Dorsal fin with adjacent growth
Diagnosis: Fibrosarcoma
Submitter: M. W. Newman
- RTLA 771. Pacific oyster, Crassostrea gigas
Material: One gross specimen
Diagnosis: Pedunculated vesiculo-epithelial polyp of the mantle
Submitter: J. G. Denison

- RTLA 772. Rainbow trout, Salmo gairdneri
Material: A piece of a kidney tumor; 4 microscope slides
Diagnosis: Nephroblastoma
Submitter: C. E. Smith
- RTLA 773. Spring or chinook salmon, Oncorhynchus tshawytscha
Material: Three microscope slides
Diagnosis: Lymphoma
Submitter: G. R. Bell
- RTLA 774. Spot-tail shiner, Notropis hudsonius
Material: A growth found lying freely in the body cavity
Diagnosis: Vascularized tissue adjacent to or part of ovary
containing sporozoan parasites
Submitter: D. J. Klemm
- RTLA 775. Sinai desert cobra, Walterinnesia aegyptia
Material: Two pieces of kidney tissue
Diagnosis: Non-caseating granuloma similar to sarcoidosis, but not
showing Schaumann bodies
Submitter: E. Elkan
- RTLA 776. Croaker
Material: A grossly enlarged vertebral spine
Diagnosis: Exostosis
Submitter: K. Holland
- RTLA 777. Yellow perch, Perca flavescens
Material: A wedge of tissue removed from a large mass which
was found free in the body cavity
Diagnosis: Fibroma
Submitter: A. Cook
- RTLA 778. Indigo snake, Drymarchon corais couperi
Material: Four microscope slides
Diagnosis: Narcotizing enteritis
Submitter: E. A. Holzinger
- RTLA 779. Largemouth bass, Micropterus salmoides
Material: One gross specimen
Diagnosis: Well-differentiated lipoma
Submitter: J. L. Gaines, Jr.
- RTLA 780. Largemouth bass, Micropterus salmoides
Material: Spleen
Diagnosis: Mesenteric lipoma adjacent to spleen
Submitter: J. L. Gaines, Jr.
- RTLA 781. Rainbow trout, Salmo gairdneri
Material: One microscope slide
Diagnosis: Granuloma
Submitter: B. L. Munday
- RTLA 782. Spot, Leiostomus xanthurus
Material: A piece of tissue with part of a growth
Diagnosis: Microsporidia infection; Pleistophora sp.
Submitter: R. M. Overstreet

- RTLA 783. Rainbow trout, Salmo gairdneri
Material: Three microscope slides
Diagnosis: Mycobacterial granuloma
Submitter: B. L. Munday
- RTLA 784. Morelet's crocodile, Crocodylus moreletii
Material: One crocodile
Diagnosis: Anasarca associated with malnutrition
Submitter: R. H. Hunt
- RTLA 785. Morelet's crocodile, Crocodylus moreletii
Material: One crocodile
Diagnosis: Anasarca associated with malnutrition
Submitter: R. H. Hunt
- RTLA 786. Spectacled caiman, Caiman crocodilus
Material: One crocodile
Diagnosis: Normal (control)
Submitter: R. H. Hunt
- RTLA 787. Black tetra, Gymnocorymbus ternetzi
Material: One fish
Diagnosis: Pending
Submitter: M. E. Rice and T. C. Smith
- RTLA 788. Atlantic cod, Gadus morhua
Material: Ventro-posterior edge of the opercular area with a sub-epidermal, firm, growth
Diagnosis: Fibroma
Submitter: J. S. Laurie
- RTLA 789. Spring-tail lizard, Uromastix acanthinurus
Material: Material excised from a large swelling on the left hind foot
Diagnosis: Bacterial granuloma
Submitter: R. Crombie
- RTLA 790. Cunner, Tautoglabrus adspersus
Material: One gross specimen
Diagnosis: Pending
Submitter: S. Shumway
- RTLA 791. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one color transparency
Diagnosis: Dermal melanocytoma
Submitter: F. L. Rose
- RTLA 792. Tiger salamander, Ambystoma tigrinum
Material: One microscope slide; one color transparency
Diagnosis: Dermal myxofibroma
Submitter: F. L. Rose
- RTLA 793. Bluegill, Lepomis microchirus
Material: One gross specimen
Diagnosis: Cutaneous melanoma
Submitter: J. M. Barkuloo

- RTLA 794. Sydney rock oyster, Crassostrea commercialis
Material: One microscope slide; 2 color transparencies
Diagnosis: Unabsorbed spermatid tubules (associated with sex reversal)
Submitter: P. H. Wolf
- RTLA 795. Brown trout, Salmo trutta
Material: One microscope slide
Diagnosis: Leiomyoma
Submitter: C. E. Smith
- RTLA 796. Largemouth bass, Micropterus salmoides
Material: One microscope slide
Diagnosis: Cystic mesothelioma
Submitter: C. E. Smith
- RTLA 797. Golden trout, Salmo aguabonita
Material: One microscope slide
Diagnosis: Fibroepithelioma of the skin
Submitter: C. E. Smith
- RTLA 798. Boa constrictor, Boa constrictor
Material: One gross specimen
Diagnosis: Fecal impaction
Submitter: I. Gorman
- RTLA 799. Walleye, Stizostedion vitreum vitreum
Material: One gross specimen; 2 electron photomicrographs
Diagnosis: Dermal sarcoma
Submitter: W. E. Ribelin
- RTLA 800. Sauger, Stizostedion canadense
Material: One gross specimen
Diagnosis: Lipid granulomas within hyperplastic abdominal depot fat
Submitter: J. G. Hnath and D. Tomljanovich
- RTLA 801. Sauger, Stizostedion candense
Material: One gross specimen
Diagnosis: Lipid granulomas within hyperplastic abdominal depot fat
Submitter: J. G. Hnath and D. Tomljanovich
- RTLA 802. Red-spotted newt, Notophthalmus viridescens
Material: One gross specimen
Diagnosis: Gram negative bacterial infection
Submitter: G. Gentry
- RTLA 803. Brown trout, Salmo trutta
Material: Liver and associated growth
Diagnosis: Nephroblastoma
Submitter: P. M. Hine
- RTLA 804. Nile monitor, Varanus niloticus
Material: One paraffin block
Diagnosis: Heterotopic bone formation ("Myositis ossificans")
Submitter: E. Elkan

- RTLA 805. Sphaerodactylus a. argus
 Material: One gross specimen
 Diagnosis: Parasitic cyst
 Submitter: R. Crombie
- RTLA 806. Anolis garmani
 Material: One gross specimen
 Diagnosis: Bullet embedded under skin
 Submitter: R. Crombie
- RTLA 807. Striped mullet, Mugil cephalus
 Material: Five microscope slides; 4 black and white photographs
 Diagnosis: Fibroma with areas of ossification
 Submitter: D. V. Lightner
- RTLA 808. Muskellunge, Esox masquinongy
 Material: Fifteen slides
 Diagnosis: Lymphosarcoma
 Submitter: R. Sonstegard
- RTLA 809. Leopard frog, Rana pipiens
 Material: Research material including 163 microscope slides, 111 paraffin blocks, 50 slidestrips, 21 Kodachrome transparencies, reprints of 8 papers and two log books demonstrating renal adenocarcinoma
 Submitter: G. S. King
 Reprints: King, Gladys S. Evidence of a Biochemical Lesion Stage in Advance of Frog Tumor Formation. Ann. N. Y. Acad. Sci., 126(1): 222-236. 1965.
 King, Gladys S. Heterochromatic Cells During the Frog Tumor Process. Am. Zool., 9(4): 1125. 1969. (Abstr.).
- RTLA 810. Bullsnake, Pituophis catenifer
 Material: Four microscope slides
 Diagnosis: Pigmented spindle-cell sarcoma; possibly of peripheral nerve origin
 Submitter: G. Migaki
- RTLA 811. Goeduck, Panope generosa
 Material: One paraffin block containing a cyst on a siphon
 Diagnosis: Abscess
 Submitter: G. B. Pauley
- RTLA 812. Chinook salmon, Oncorhynchus tshawytscha
 Material: Two paraffin blocks containing gills with small white cysts
 Diagnosis: Parasitized by Dermocystidium
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B. Prespawning Adult Salmon Mortality Associated with a Fungus of the Genus Dermocystidium. J. Fish. Res. Bd. Can., 24(4): 843-848. 1967.

- RTLA 813. Rainbow trout, Salmo gairdneri
 Material: Two paraffin blocks
 Diagnosis: Hepatoma
 Submitter: G. B. Pauley
- RTLA 814. Shipworm, Teredo sp. (fossil specimen)
 Material: A polished section of conifer wood containing the borings and pellets of Teredo and a petrified Teredo body
 Diagnosis: No neoplastic involvement; the specimen will serve to demonstrate the possibility of finding a neoplasm in an invertebrate fossil
 Submitter: J. A. Tuta
- RTLA 815. Pacific oyster, Crassostrea gigas
 Material: Four paraffin blocks
 Diagnosis: Parasitized by Protista incertae sedis
 Submitter: G. B. Pauley
 Reprint: Becker, C. Dale and Gilbert B. Pauley. An Ovarian Parasite (Protista incertae sedis) from the Pacific Oyster, Crassostrea gigas. J. Invertebr. Pathol., 12: 425-437. 1968.
- RTLA 816. Freshwater mussel, Gonidea angulata
 Material: One paraffin block
 Diagnosis: Parasitized by the trematode, Aspidogaster conchicola
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B. and C. Dale Becker. Aspidogaster conchicola in Mollusks of the Columbia River System with Comments on the Host's Pathological Response. J. Parasitol., 54(4): 917-920. 1968.
- RTLA 817. Painted turtle, Chrysemys picta
 Material: Two paraffin blocks
 Diagnosis: Two ulcers in the stomach and one in the duodenum
 Submitter: G. B. Pauley
 Reprint: Pauley, Gilbert B. and Douglas L. Robberson. A Painted Turtle (Chrysemys picta) with Ulcers in the Stomach and Duodenum. Northwest Sci., 40(2): 79-82. 1966.
- RTLA 818. Butter clam, Saxidomus giganteus
 Material: Four paraffin blocks
 Diagnosis: Abscesses
 Submitter: G. B. Pauley
- RTLA 819. Coho salmon, Oncorhynchus kisutch
 Material: A wedge of tissue removed from a growth located on the dorsal side of the fish just caudal to the head; one color photograph
 Diagnosis: Fibroma
 Submitter: G. Hoskins

- RTLA 820. Marbled salamander, Ambystoma opacum
 Material: Encapsulated tumor about 1/2 cm sphere removed from the neck near the area of jaw proximal; 4 slides; 1 paraffin block; 6 photographs
 Diagnosis: Non-invasive Leydig cell neoplasm
 Submitter: C. T. Wilson
- RTLA 821A. & B. Striped mullet, Mugil cephalus
 Material: Four slides; 3 photographs
 Diagnosis: Ossifying fibroma
 Submitter: D. V. Lightner
- RTLA 822. Rainbow trout, Salmo gairdneri
 Material: One-half of a growth; 4 photographs; 4 negatives
 Diagnosis: Pending
 Submitter: P. M. Hine
- RTLA 823. Sauger, Stizostedion canadense
 Material: One gross specimen with a growth posterior to the left eye and a small, slightly raised lesion on the right lateral side; one color transparency
 Diagnosis: Ossifying fibroma
 Submitter: D. Tomljanovich
- RTLA 824. English sole, Parophrys vetulus
 Material: One gross specimen with a large growth posterior to the head between the lateral line and dorsal fin on the eyed-side
 Diagnosis: Papilloma
 Submitter: N. P. Boyce
- RTLA 825. Brown bullhead, Ictalurus nebulosus
 Material: One gross specimen
 Diagnosis: Epidermal carcinoma
 Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 826. Brown bullhead, Ictalurus nebulosus
 Material: One gross specimen
 Diagnosis: Epidermal hyperplasia overlying dermal fat deposit
 Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 827. Brown bullhead, Ictalurus nebulosus
 Material: One gross specimen
 Diagnosis: Papilloma
 Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 828. Brown bullhead, Ictalurus nebulosus
 Material: One gross specimen
 Diagnosis: Inflammatory lesion with hyperpigmentation
 Submitter: J. C. Harshbarger
- RTLA 829. Florida gar, Lepisosteus platyrhincus
 Material: One gross specimen
 Diagnosis: Pending
 Submitter: J. C. Harshbarger and G. G. Combs

- RTLA 830. Yellow bullhead, Ictalurus natalis
Material: One gross specimen
Diagnosis: Papilloma
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 831. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Inflammatory lesion
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 832. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Papillary hyperplasia versus papilloma
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 833. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Papillary hyperplasia versus papilloma
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 834. Brown bullhead, Ictalurus nebulosus
Material: One fish head
Diagnosis: Papilloma
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 835. Brown bullhead, Ictalurus nebulosus
Material: One fish head
Diagnosis: Papilloma
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 836. Brown bullhead, Ictalurus nebulosus
Material: One fish head
Diagnosis: Subdermal or intradermal fat deposit
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 837. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Pigmented papillary hyperplasia
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 838. Brown bullhead, Ictalurus nebulosus
Material: One gross specimen
Diagnosis: Papilloma
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 839. Yellow bullhead, Ictalurus natalis
Material: One gross specimen
Diagnosis: Nevus
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 840. Brown bullhead, Ictalurus nebulosus
Material: One fish head
Diagnosis: Pigmented papillary hyperplasia
Submitter: J. C. Harshbarger and G. G. Combs

- RTLA 841. Brown bullhead, Ictalurus nebulosus
Material: One fish head
Diagnosis: Enlarged taste papillae
Submitter: J. C. Harshbarger and G. G. Combs
- RTLA 842. Turbot, Rhombus maximus
Material: One slide; 3 blocks
Diagnosis: Malignant lymphoma
Submitter: J. Nightingale
- RTLA 843. Northern pike, Esox lucius
Material: Twenty slides
Diagnosis: Exuberant overgrowth of fibrous tissue in response
to a probable injury
Submitter: W. Lampert
- RTLA 844-887. Oyster, Crassostrea virginica
Material: Forty-three slides
Diagnosis: Hematopoietic neoplasms
Submitter: E. M. Frierman

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<u>Agkistrodon piscivorus</u>	721
<u>Allosaurus fragilis</u>	587
<u>Alosa sapidissima</u>	241
Alpine newt	70, 591
<u>Ambystoma mexicanum</u>	506
<u>Ambystoma opacum</u>	577, 820
<u>Ambystoma tigrinum</u>	702-708, 791, 792
American brook lamprey	84
American bullfrog	73, 205; 380
American chameleon	55
American cockroach	56
American oyster	150, 171, 224, 502
American shad	241
American toad	756
Amphioxus	340
<u>Ampullarius australis</u>	269
<u>Anagasta kuehniella</u>	192
Angelfish	173, 515
<u>Anguilla vulgaris</u>	228, 457-459
<u>Anodonta californiensis</u>	38, 132, 141-145
<u>Anodonta oregonensis</u>	133, 140
<u>Anolis</u> sp.	727
<u>Anolis carolinensis</u>	55
<u>Anolis garmani</u>	806
<u>Anopheles annulipes</u>	285
<u>Apistogramma ramirezi</u>	166
<u>Aplysia</u> sp.	355, 357
<u>Aplysia californica</u>	168, 237
<u>Aplysia dactylomela</u>	344, 356, 358, 365, 368
Apple snail	269
<u>Archosargus probatocephalus</u>	331
<u>Arripis trutta</u>	648
<u>Astropecten</u> (?) sp.	345

RTLA NO.

Atlantic cod	788
Atlantic eel	228, 457-459
Atlantic menhaden	677
Atlantic needlefish	18
Atlantic octopus	19
Atlantic salmon	431, 589, 723
Australian rock oyster	602, 757, 758, 767
Australian skink	503
Australian snake-necked turtle	631
<u>Australorbis glabratus</u>	36

B

Bass	747, 746
<u>Bathygobius soporator</u>	400
Bilharzia snail	36
<u>Bimera</u> sp.	131
<u>Bitis nasicornis</u>	379, 508, 729
Black bullhead	682, 683
Black crappie	101
Black-lip pearl oyster	538
Black mollie	493
Black sea bass	364
Blacktail platy	230
Black tetra	787
Black tip shark	764
Bloater	99, 176, 273, 275
Blue crab	4, 243
Bluefish	467, 585, 586, 680, 684, 691, 793
Blue gourami	91
Blue mussel	235
Boa constrictor	116, 455A & B, 498, 588
<u>Boa constrictor</u>	116, 455A & B, 498, 588
<u>Bombyx mori</u>	85, 183, 190
Box turtle	113, 716
<u>Brachidontes recurvus</u>	329
<u>Branchiostoma caribaeum</u>	340
Bream	220
<u>Brevoortia tyrannus</u>	677
Broad-banded copperhead	226
Brook trout	216, 303, 518, 687, 795, 803
Brown bullhead	8, 9, 86, 281, 288, 289, 328, 384, 385, 388, 389, 391, 392-396, 398, 399, 472-475, 766, 825-828, 831-838, 840, 841
Brown shrimp	725
<u>Bufo americanus</u>	756

RTLA NO.

<u>Bufo arenarum</u>	510
<u>Bufo boreas</u>	206
<u>Bufo marinus</u>	200
<u>Bufo regularis</u>	418
Bull shark	212, 547
Bullsnake	810
Burbot	670

C

Cabbage looper	181
<u>Caecilia tentaculata</u>	239, 263
Caecilian	239, 263
<u>Caiman crocodilus</u>	786
California king snake	478
California sea mussel	20
<u>Callianassa affinis</u>	628
<u>Callinectes sapidus</u>	4, 243
<u>Caloselasma rhodostoma</u>	246
<u>Carangoides ajax</u>	763
<u>Carangoides equula</u>	763
<u>Carassius auratus</u>	11, 88, 433, 434, 655, 676
<u>Carcharhinus leucas</u>	212, 547
<u>Carcharhinus melanopterus</u>	764
<u>Catostomus catostomus</u>	213
<u>Catostomus commersoni</u>	7, 24, 177, 639, 645, 646
<u>Catostomus macrocheilus</u>	118
<u>Centropristis striata</u>	364
<u>Ceramica picta</u>	182
Chain pickerel	10, 23, 402
<u>Chamaeleo dilepis</u>	462
Channel catfish	277, 575
<u>Chelodina longicollis</u>	631
<u>Chelonia mydas</u>	12, 121, 351, 651
<u>Chelydra serpentina</u>	74
Chinook salmon	248, 259, 423, 526, 697, 701, 773, 812
<u>Chlamys (Lyropecten) madisonius</u>	541
<u>Chlorohydra viridissima</u>	52
<u>Choristoneura fumiferana</u>	78
<u>Choristoneura murinana</u>	186
<u>Chrysemys picta</u>	34, 94, 718, 817
<u>Chrysemys scripta elegans</u>	201, 271
<u>Cichlasoma festivum</u>	594
<u>Cichlasoma meeki</u>	124
Cichlid	761
Claw-footed toad	31, 32, 109, 238
Clematis blister beetle	100
Clingfish	414
<u>Cnemidophorus lemniscatus</u>	130

RTLA NO.

Cobra	117, 556-561
Cockchafer	187
<u>Coenobita clypeatus</u>	483
Coho salmon	105, 197, 203, 258, 261, 268, 283, 284, 286, 430, 440, 450-454, 530, 533, 574, 595A & B, 580, 671, 819
<u>Colias lalia</u>	554
Colonial tunicate	346, 369, 371, 372
Common red-eared turtle	271
<u>Cordylus polyzonus</u>	633
<u>Coregonus clupeaformis</u>	669
<u>Coregonus hoyi</u>	99, 176, 257, 273
Corn earworm	180, 184
Corn snake	439, 465
Crane fly	191
<u>Crassostrea commercialis</u>	107, 151, 152, 160-162, 223, 602, 757, 758, 767, 794
<u>Crassostrea gigas</u>	37, 108, 134, 135, 153, 154, 215, 225, 771, 815
<u>Crassostrea virginica</u>	150, 171, 224, 502, 713, 714, 844-887
<u>Crenobia</u> sp.	119
<u>Crocodylus moreletii</u>	784, 785
<u>Crotalus atrox</u>	428, 429
<u>Crotalus horridus horridus</u>	275, 378, 486
<u>Cryptobranchus alleganiensis</u>	233
Cunner	550-553, 675, 790
<u>Curculio caryae</u>	563, 564
Cutthroat trout	267, 726
<u>Cynoscion regalis</u>	608
<u>Cyprinodon variegatus</u>	536
<u>Cyprinus carpio</u>	499
 <u>D</u>	
Dace	82
<u>Dactyligera muscula</u>	245
Dagger shrimp	17
Darkblotched rockfish	253
Death adder	663
<u>Deltistes</u> sp.	256
<u>Dendraster eccentricus</u>	341
<u>Dendroctonus ponderosae</u>	123
<u>Dermochelys coriacea</u>	63
<u>Diapterus plumieri</u>	596, 678
Dinosaur	587
<u>Diprion hercyniae</u>	27
Discus fish	178

RTLA NO.

<u>Doderleinia berycoides</u>	481
Douglas-fir tussock moth	438
Dover sole	264, 496, 497
<u>Draco</u> sp.	266
Dragonfly	227
<u>Dreissena polymorpha</u>	537
<u>Drosophila melanogaster</u>	3, 26, 49, 81, 198, 229, 249, 381-383, 443B
<u>Drymarchon corais couperi</u>	231, 778
<u>Dugesia</u> sp.	119
<u>Dugesia dorotocephala</u>	1, 30, 102, 159, 578, 724
Dwarf clawed frog	327, 419, 420
Dwarf gourami	554

E

Eastern coral snake	167
<u>Egernia napoleonsis</u>	503
<u>Eisenia foetida</u>	581
<u>Elaphe guttata guttata</u>	439, 465
<u>Elaphe obsoleta obsoleta</u>	125
<u>Elaphe obsoleta rossalenii</u>	507
<u>Elaphe vulpina</u>	96
Electric catfish	760
<u>Eleginops maclovinus</u>	476
Elephant trunk snake	532
Emerald lizard	482
<u>Emmonsia crescens</u>	576A, B, & C
<u>Enchytraeus</u> sp.	535
English sole	165, 425, 824
<u>Epicauta cinerea</u>	100
<u>Epinephelus morio</u>	362, 363, 366
<u>Eptatretus stouti</u>	295
<u>Esox lucius</u>	112, 127, 623A & B, 640, 644, 647, 689, 694, 733, 738, 743, 748, 843
<u>Esox masquinongy</u>	808
<u>Esox niger</u>	10, 23, 402
<u>Estigmene acrea</u>	185
European cockchafer	189
European corn borer	43
<u>Euthynnus pelamis</u>	122, 170
Everglade snake	507

F

Fiddler crab	349, 350
Firebellied newt	214, 513, 539, 540

RTLA NO.

Firemouth	124
Fir-shoot roller	186
Fish	260, 330, 555
Flathead sole	413, 415, 417, 426, 667
Florida gar	829
Florida pompano	500
Florida softshell turtle	654
Flying lizard	266
Fox snake	96
Frillfin goby	400
<u>Fundulus sp.</u>	512
<u>Fundulus heteroclitus</u>	204, 222, 762
Fungus	576A, B & C

G

<u>Gadus macrocephalus</u>	157
<u>Gadus morhua</u>	517, 788
<u>Galaxias vulgaris</u>	665
<u>Galleria mellonella</u>	28
Gaper clam	21
Garter snake	95, 634
<u>Gekko gekko</u>	424
<u>Genyonemus lineatus</u>	62, 404, 405, 495, 549
Ghost shrimp	628
Giant conch	110
Giant leathery turtle	63
Giant toad	200
<u>Girella tricuspidata</u>	672
<u>Gobio gobio</u>	219
Goby	342
Goeduck	811
Golden orfe	516
Golden trout	797
Goldfish	11, 88, 433, 434, 655, 676
<u>Gonidea angulata</u>	148, 149, 816
Granary weevil	46
Gray snapper	485
Great sculpin	666
Greater wax moth	28
Greek land tortoise	717
Green crab	674
Green turtle	12, 121, 651
Gudgeon	219
Guppy	66, 75, 199, 247, 276, 466, 607, 712, 787

H

Haddock

519

RTLA NO.

Half-toed gecko	240
<u>Haplochromis ismaeli</u>	761
<u>Heliothis zea</u>	180, 184
Hellbender	233
<u>Hemerocampa pseudotsugata</u>	438
<u>Hemidactylus frenatus</u>	240
<u>Hermisenda crossicornis</u>	64
Hermit crab	352, 483
<u>Heterocentrotus mammillatus</u>	236
<u>Heterodon platyrhinos</u>	664
<u>Hippocampus</u> sp.	42
<u>Hippoglossoides elassodon</u>	413, 415, 417, 426, 427, 667
Hogchoker	609
Hognose snake	664
<u>Homo sapiens</u>	433A
Hooked mussel	329
Hornyhead chub	693
Horseshoe crab	336, 370
House fly	65, 90
<u>Hydrolagus colliei</u>	265, 417
<u>Hydrosaurus amboinensis</u>	291
<u>Hyla caerulea</u>	410
<u>Hymenochirus boettgeri</u>	327, 419, 420

I

<u>Ictalurus</u> sp.	129, 583, 597, 692, 750-755
<u>Ictalurus catus</u>	613
<u>Ictalurus melas</u>	682, 683
<u>Ictalurus natalis</u>	290, 386, 387, 390, 397, 406, 468-471, 582, 584, 620, 621, 695, 696, 830, 839
<u>Ictalurus punctatus</u>	277, 575
Ide	516
<u>Iguana iguana</u>	179, 234, 460
<u>Ilyophis brunneus</u>	565
Indian striate adder	722
Indigo snake	231, 778

J

Japanese beetle	728A & B
Jellyfish	360, 367
Jewfish	769

K

Kahawai	648
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RTLA NO.

Key brotula	688
Keyhole cichlid	511
Khapra beetle	45
Killifish	512
King crab	50

L

<u>Labeo bicolor</u>	98
<u>Lacerta viridis</u>	482
<u>Lagodon rhomboides</u>	343
Lake trout	514
Lake whitefish	669
<u>Lampetra lamottei</u>	84
<u>Lampropeltis getulus</u>	478
Larch sawfly	188, 196
Largemouth bass	14-16, 679, 681, 685, 779, 780, 796
Largescale sucker	118
Largetooth sawfish	546
Leafhopper	44
<u>Leiostomus xanthurus</u>	103, 422, 782
Leopard frog	41, 60, 172, 278, 279, 282, 408, 435, 456, 487-492, 577, 656-660, 809
Lightning bug	128
<u>Limulus polyphemus</u>	50, 336, 370
<u>Linckia multifora</u>	442
Lingcod	106, 254, 652
<u>Liophis</u> sp.	548
Littleneck clam	155
<u>Locusta migratoria</u>	68
Longhorn sculpin	445, 446
Longnose gar	603
Longnose sucker	213
<u>Lota lota</u>	670
Luderick	672
<u>Lumbricus</u> sp.	80, 104, 169, 250, 252, 262, 287
<u>Lumbricus terrestris</u>	2, 33, 158, 579, 615-619
<u>Lutjanus griseus</u>	485

M

<u>Macracanthorhynchus hirudinaceus</u>	293
Madeira cockroach	69
<u>Madrepora kauaiensis</u>	54
<u>Malapterurus electricus</u>	760

	RTLA NO.
Malayan monitor	461, 719
Manure worm	581
Marbled salamander	577, 820
<u>Margaritifera margaritifera</u>	137-139, 146
Mediterranean flour moth	192
<u>Melanogrammus aeglefinus</u>	519
<u>Melelontha</u> sp.	187, 189
<u>Mercenaria mercenaria</u>	421
<u>Merlangius merlangus</u>	521
<u>Metynnis maculatus</u>	57
Mexican axolotl	506
<u>Micropterus dolomieu</u>	156
<u>Microstomus pacificus</u>	264, 496, 497, 824
<u>Micropterus salmoides</u>	14-16, 679, 681, 685, 779, 780, 796
<u>Micrurus fulvius fulvius</u>	167
Moon snail	76
Morelet's crocodile	784, 785
<u>Morone americana</u>	600, 601
<u>Morone saxatilis</u>	6, 292, 686
Mosquito	285
Mountain pine beetle	123
Mud clam	5, 115
Mud puppy	97
<u>Mugil cephalus</u>	807, 812A & B
Mummichog	204, 222, 762
<u>Musca domestica</u>	65, 90
Muskellunge	808
<u>Mya arenaria</u>	5, 115, 147
<u>Myoxocephalus octodecemspinosus</u>	445, 446
<u>Myoxocephalus polyacanthocephalus</u>	666
<u>Mytilus californianus</u>	20
<u>Mytilus edulis</u>	235
<u>N</u>	
<u>Naja naja</u>	117, 556-561
<u>Natrix stolata</u>	722
<u>Necturus maculosus</u>	97
Neotropical race runner	130
<u>Nereis</u> (?) sp.	
Nile monitor lizard	632, 635, 804
<u>Nocomis biguttatus</u>	693
Northern pike	112, 127, 623A & B, 640, 644, 647, 689, 694, 733, 738, 743, 748, 843
<u>Nosema juli</u> n. sp.	484
<u>Notophthalmus viridescens</u>	67, 232, 272, 448, 501, 534, 661A & B, 662, 802
<u>Notropis hudsonius</u>	774
Nudibranch	64

RTLA NO.

Nyctimystes daymanio
Nyctimystes kubori

412
 411

O

Octopus vulgaris
Ogcocephalus nasutus
Ogilbia cavorum
Oligocottus maculosus
Oncorhynchus kisutch

19
 593
 688
 668
 105, 197, 203, 258, 261,
 268, 283, 284, 286, 430,
 440, 450-454, 530, 533,
 574, 580, 595A & B, 671, 819

Oncorhynchus masou ishikawae
Oncorhynchus nerka
Oncorhynchus rhodurus f. macrostomus
Oncorhynchus tshawytscha

572
 202, 242, 653
 570, 571
 248, 259, 423, 526, 697,
 701, 773, 812

Ophiodon elongatus
Orconectes rusticus
 Ornamental tortoise
Oryctes nasicornis
Oryctes rhinoceros
Ostrinia nubilalis

106, 254, 652
 79, 280
 718
 194
 193, 195
 43

P

Pacific cod
 Pacific electric ray
 Pacific hagfish
 Pacific oyster

157
 494
 295
 37, 108, 153, 154, 215,
 225, 771, 815

Paddlefish
Pagurus sp.
 Painted turtle
Palaemon sp.
Palaemonetes pugio
Panope americana
Panope generosa
Papilio glaucus
Paralichthys dentatus
Parophrys vetulus
 Patagonian shorefish
 Pecan weevil
 Pen shell
Penaeus aztecus
Penaeus setiferus
 Pencilfish
Perca flavescens

463
 352
 34, 94, 817
 208
 17
 542-545
 811
 637
 710
 165, 425
 476
 563, 564
 353
 126, 209, 725
 210
 432
 777

RTLA NO.

<u>Peridroma saucia</u>	47, 48
<u>Periplaneta americana</u>	56
<u>Petromyzon marinus</u>	29, 89
<u>Photuris</u> sp.	128, 251
<u>Phyllomedusa trinitatis</u>	409
<u>Physa heterostrophia</u>	35
Pilot black snake	125
<u>Pinctada margaritifera</u>	538
Pinfish	343
<u>Pituophis catenifer</u>	810
<u>Placobdella parasitica</u>	437
Plaice	522, 528, 529
<u>Planaria dactyligera musculosa</u>	270, 477, 477A
Planarian	1, 30, 102, 119, 159, 245, 477, 477A, 578, 724
<u>Platichthys stellatus</u>	504, 505
<u>Pleuronectes platessa</u>	522, 528, 529
<u>Poecilia</u> sp.	493
<u>Poecilia reticulata</u>	66, 75, 199, 247, 276, 466, 607, 712
<u>Poecilobrycon harrisoni</u>	432
<u>Polinices lewisii</u>	76
<u>Polyodon spathula</u>	463
<u>Pomatomus saltatrix</u>	444
<u>Pomoxis nigromaculatus</u>	101
Pond snail	35
<u>Popillia japonica</u>	728A & B
Praying mantis	211, 274
<u>Prionus imbricornis</u>	531, 598
<u>Pristiphora erichsonii</u>	188, 196
<u>Pristis perotteti</u>	546
<u>Procambarus clarkii</u>	59, 562
<u>Python molurus</u>	441
 <u>Q</u>	
Quahog	421
Queenfish	53
 <u>R</u>	
Rainbow trout	25, 77, 217, 296-302, 304, 306-326, 464, 527, 566-568, 590, 592, 622, 629, 630, 673, 711, 765, 772, 781, 783, 813, 822
<u>Raja radiata</u>	636
Ramirez's dwarf cichlid	166

RTLA NO.

<u>Rana catesbeiana</u>	73, 205, 380
<u>Rana montezumae</u>	207
<u>Rana palustris</u> x <u>pipiens</u>	403
<u>Rana pipiens</u>	41, 60, 172, 278, 279, 282, 408, 435, 456, 487-492, 577, 656-660, 809
Ratfish	265, 416
Red-eared turtle	201
Red grouper	362, 363, 366
Red-spotted newt	67, 232, 272, 448, 501, 534, 577, 661A & B, 662, 802
Redtailed black shark	98
Rhinoceros beetle	193, 195
Rhinoceros viper	379, 508, 729
<u>Rhombus maximus</u>	842
River Jack	508
Roach	221
"Robalo"	476
Rock (stone?) crab	335
<u>Rutilus rutilus</u>	221

S

Sail lizard	291
<u>Salmo aguabonita</u>	797
<u>Salmo clarki</u>	267, 726
<u>Salmo gairdneri</u>	25, 77, 217, 296-302, 304, 306-326, 464, 527, 566-568, 590, 592, 622, 629, 630, 673, 700, 711, 765, 772, 781, 783, 813, 822
<u>Salmo salar</u>	431, 589, 723
<u>Salmo trutta</u>	518, 687, 795, 803
Saltmarsh caterpillar	185
<u>Salvelinus fontinalis</u>	216, 303, 715
<u>Salvelinus miyabei</u> x <u>S. fontinalis</u>	573
<u>Salvelinus namaycush</u>	514
Sandbar shark	523, 524
Sand dollar	341
Sauger	800, 801, 823
<u>Saxidomus giganteus</u>	92, 136, 818
Scallop	569
<u>Sceloporus occidentalis</u>	87
<u>Sciema antarctica</u>	769
<u>Scomberomorus maculatus</u>	373-375
Sea anemone	359
Sea hare	168, 237, 344, 355-358, 365, 368
Seahorse	42
Sea lamprey	29, 89

RTLA NO.

Sea morid	520
Sea squirt	337
Sea urchin test	83
<u>Sebastes crameri</u>	253
<u>Sebastes diploproa</u>	61
<u>Seriphus politus</u>	53
Sheepshead	331, 333, 334, 376, 377, 649
Sheepshead minnow	536
Shipworm	814
Shortnose batfish	593
<u>Sicyogaster maeandricus</u>	414
Silkworm	85, 183, 190
Silver dollar	57
Sinai desert cobra	775
<u>Sitophilus granarius</u>	46
Skipjack tuna	122, 170
Slatepencil urchin	236
Smallmouth bass	156
Smooth Washington clam	92, 136, 818
Snapping turtle	74
Sockeye salmon	202, 242, 653
Soft-shell clam	147
South American gartersnake	548
South American red-eared turtle	271
Spanish mackerel	373-375
Spectacled caiman	786
<u>Sphaerodactylus a. argus</u>	805
Spiny-headed worm	293
<u>Spisula solidissima</u>	294
Splitnose rockfish	61
Spot	103, 422, 782
Spot-tail shiner	774
Spotted eel	338
Spotted metynnis	57
Spring salmon	773
Spring-tail lizard	789
Spruce budworm	78
Spruce sawfly	27
Square-marked toad	418
Staghorn coral	436, 599, 604-606
Starry flounder	504, 505
Steelhead rainbow trout	700
<u>Stizostedion canadense</u>	800, 801, 823
<u>Stizostedion vitreum vitreum</u>	22, 93, 163, 164, 525, 612, 624-627, 638, 641-643, 690, 698, 699, 709, 730-732, 734-736, 739-742, 744, 745, 747, 749, 799
Striped bass	6, 292, 686
Striped mojarra	596, 678

RTLA NO.

Striped mullet	807, 821A & B
<u>Strombus gigas</u>	110
<u>Strongylura marina</u>	18
<u>Strophitus undulatus</u>	244
Sugar trout	332
Summer flounder	710
Surf clam	294
Sydney rock oyster	107, 151, 152, 160-162, 223, 794
<u>Symphysodon discus</u>	178

T

<u>Tautogolabrus adspersus</u>	550-553, 675, 790
Teju	720
<u>Teredo</u> sp.	814
<u>Terrapene carolina</u>	113, 509, 716
<u>Testudo hermanni</u>	717
<u>Thamnophis sirtalis</u>	95, 634
Thorny skate	636
Tidepool sculpin	668
Tiger python	441
Tiger salamander	702-708, 791, 792
Tiger swallowtail	637
Tilehorned prionus	531, 598
Timber rattlesnake	275, 378, 486
<u>Tipula paludosa</u>	191
Tokay gecko	424
<u>Torpedo californica</u>	494
<u>Trachinotus carolinus</u>	500
<u>Tresus nuttalli</u>	21
<u>Trichogaster trichopterus</u>	91
<u>Trichoplusia ni</u>	181
<u>Trinectes maculatus</u>	609
Trinidad leaf frog	409
<u>Trionyx ferox</u>	654
<u>Triturus alpestris</u>	70, 591
<u>Trogoderma granarium</u>	45
<u>Tupinambis rufescens</u>	720
Turbot	842
Two-flapped chameleon	462

U

<u>Uca pugilator</u>	349, 350
Ulua	763
<u>Uromastyx acanthinurus</u>	789
<u>Urophycis tenuis</u>	770

RTLA NO.V

<u>Varanus niloticus</u>	632, 635, 804
<u>Varanus salvator</u>	461, 719
Variegated cutworm	47, 48
<u>Venerupis staminea</u>	155
<u>Venus mercenaria</u>	421

W

Walleye	22, 93, 163, 164, 525, 612, 624-627, 638, 641-643, 690, 698, 699, 709, 730-732, 734-736, 739-742, 744, 745, 747, 749, 799
<u>Walterinnesia aegyptia</u>	775
Warmouth	401
Water moccasin	721
Water snake	120
Weakfish	608
Western diamondback rattler	428, 429
Western fence lizard	87
Western toad	206
White catfish	613
White croaker	62, 404, 405, 495, 549
White hake	770
White perch	600, 601
White sucker	7, 24, 177, 639, 645, 646
White ulua	763
White's tree frog	410
Whiting	521

XYZ

<u>Xenochrophis piscator</u>	120
<u>Xenopus laevis</u>	31, 32, 109, 238, 614
<u>Xiphophorus maculatus</u> x <u>helleri</u>	230
Yellow bullhead	290, 386, 387, 390, 397, 406, 468-471, 582, 584, 620, 621, 695, 696, 830, 839
Yellow perch	777
Yellowfin goby	58, 479, 480
Zebra caterpillar	182

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Dr. John C. Harshbarger
Registry of Tumors in Lower Animals
National Museum of Natural History
Smithsonian Institution
Washington, D.C. 20560

DATE RECD. _____
CONTRIBUTOR'S NO. _____
RTLA NO. _____
USNM NO. _____
NIH HISTOPATH NO. _____

COMMON NAME _____ FAMILY _____
PHYLUM _____ GENUS _____
CLASS _____ SPECIES _____
ORDER _____

CATEGORY: NEOPLASM ____ INFLAMMATION ____ INFECTION ____ PARASITIC ____ TOXIC ____
DEVELOPMENTAL DEFECT ____ TRAUMATIC ____ NORMAL ____ OTHER ____
CONTRIBUTOR (NAME & ADDRESS): _____ COLLECTOR (NAME & ADDRESS): _____

ITEMS SUBMITTED (QUANTITY):

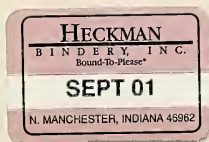
GROSS MATERIAL _____ PHOTOGRAPHS _____
SLIDES _____ REPRINTS _____
BLOCKS _____ OTHER _____
ORIGIN OF ANIMAL: MARINE ____ FRESHWATER ____ ESTUARINE ____ TERRESTRIAL ____
WHERE COLLECTED _____

DATE COLLECTED ____ SEX ____ AGE ____ STAGE OF LIFE CYCLE ____
HOW KILLED _____ FIXATION _____
GROSS DESCRIPTION _____

MICROSCOPE DX _____

COMMENTS (e.g., possible exposure to chemical pollutants or infectious agents,
incidence and duration of this condition in the population, etc.)

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